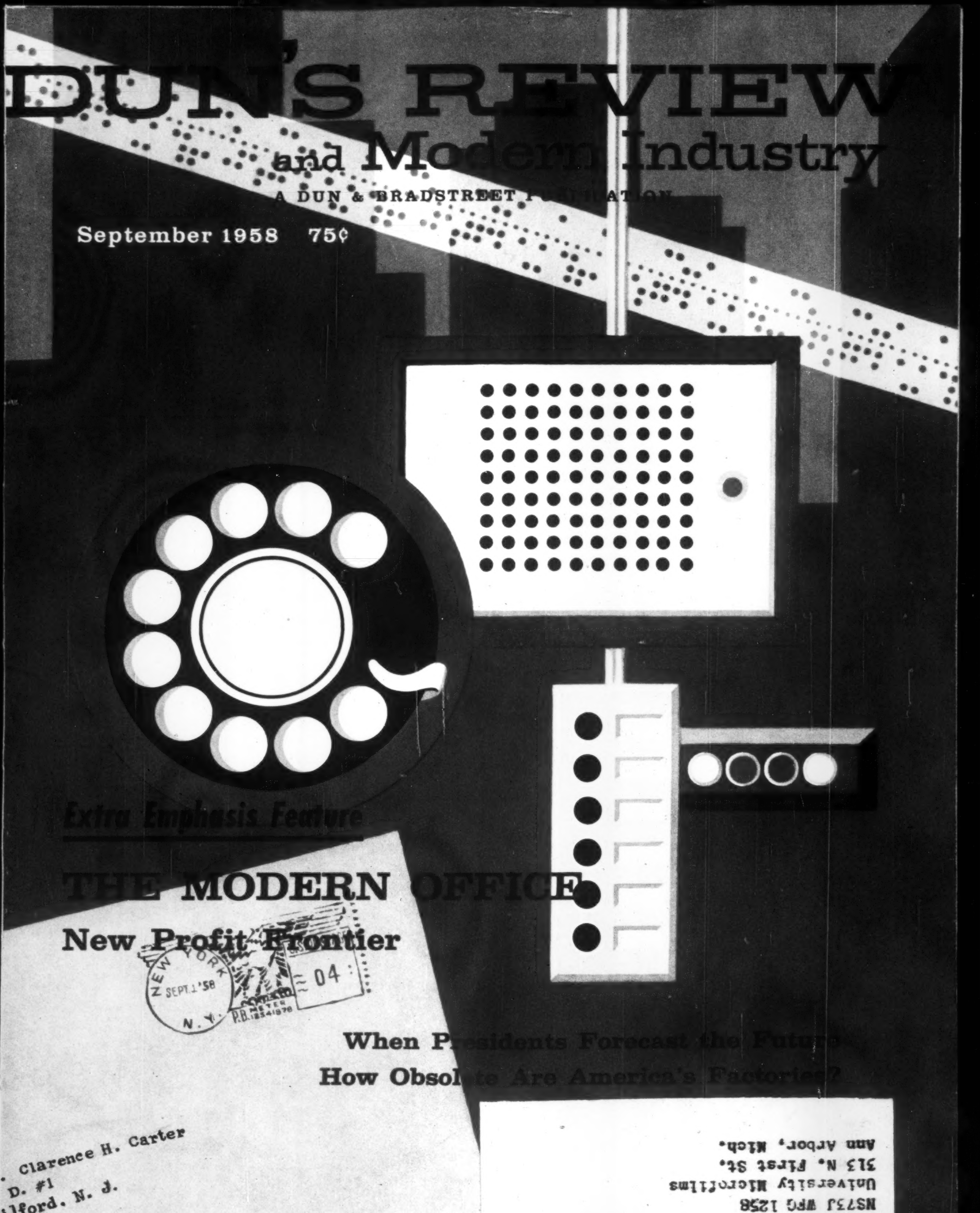

NEW YORK
SEPT 1 '58
N.Y.
04
P.B. METER
1234 1978
Clarence H. Carter
D. #1
ilford. N. J.

DUN'S REVIEW

and Modern Industry

A DUN & BRADSTREET PUBLICATION

September 1958 75¢

Extra Emphasis Feature

THE MODERN OFFICE

New Profit Frontier

When Presidents Forecast the Future

How Obsolete Are America's Factories?

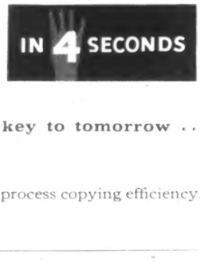
NS73J WFG 1258
University Microfilms
313 N. First St.
Ann Arbor, Mich.

"your copy in just 4 seconds"

The "Thermo-Fax" Copying Machine

...quick and clean because it's dry!

The quick, clean simplicity of dry process copying is yours *only* in an All-Electric "Thermo-Fax" Copying Machine. Because it's dry, there are no chemicals to pour . . . no negatives to make. *This* modern copy maker gives you copies made in one easy step by electricity alone. You get 4-second copies of business facts for as little as 5¢ each. Try it in your office today on reports, letters, invoices or any forms you now retype or duplicate. See how *you* can save time and money with the simplest, fastest copy method of all. Call your dealer now for your demonstration. Or send the coupon below for full details.



IN 4 SECONDS

MINNESOTA MINING & MANUFACTURING COMPANY—where RESEARCH is the key to tomorrow

Minnesota Mining & Manufacturing Company, Dept. HQ-98, St. Paul 6, Minnesota

Send me a copy of your informative new book, "*Better Business Communications*," and full details on clean, dry process copying efficiency.

Thermo-Fax BRAND COPYING PRODUCTS

PRODUCT OF 3M COMPANY RESEARCH

NAME ______ ADDRESS ______

COMPANY ______ CITY ______ ZONE ______ STATE ______

The terms "Thermo-Fax" and "Secretary" are trademarks of Minnesota Mining & Mfg. Co.

DUN'S REVIEW
and Modern Industry

September
1958

Vol. 72 No. 3

Articles and Features

How Top Management Forecasts the Future 33
Many companies find it pays to hitch your wagon to a good economic forecast. MELVIN J. GOLDBERG

Cobwebs on the P&L Statement 36
Obsolescent equipment is often a real drag on profits today, this new survey shows. A DR&MI STAFF REPORT

Executive Pay Feels the Pinch 38
The acid test of recession has shown up the weak spots in management compensation programs. ARCH PATTON

Top Management Looks at Executive Age and Retirement 40
Company presidents examine one of industry's most perplexing human problems. KENNETH HENRY

Defense Business: How Much Is Enough? 42
Federal budget cuts can hurt the defense-oriented company that's not geared to roll with the punch. MELVIN MANDELL

Keeping Your Workforce Ready for the Upturn 45
How companies keep their workers busy when production and sales are down. JOCELYN KNOWLES

Organizing to Protect Your Profits Overseas 122
Tax havens are tempting, but be sure you understand the ground rules. ALEXANDER O. STANLEY

Sales Prospects Look Bright: A Survey of Business Men's Expectations . 25

New Marketing Twist: Company Sponsors Trade Show 47

Lines on Lines on Charts *Verse* RICHARD ARMOUR 121

What Makes a "Fair Labor Law"? PAUL WOOTON 145

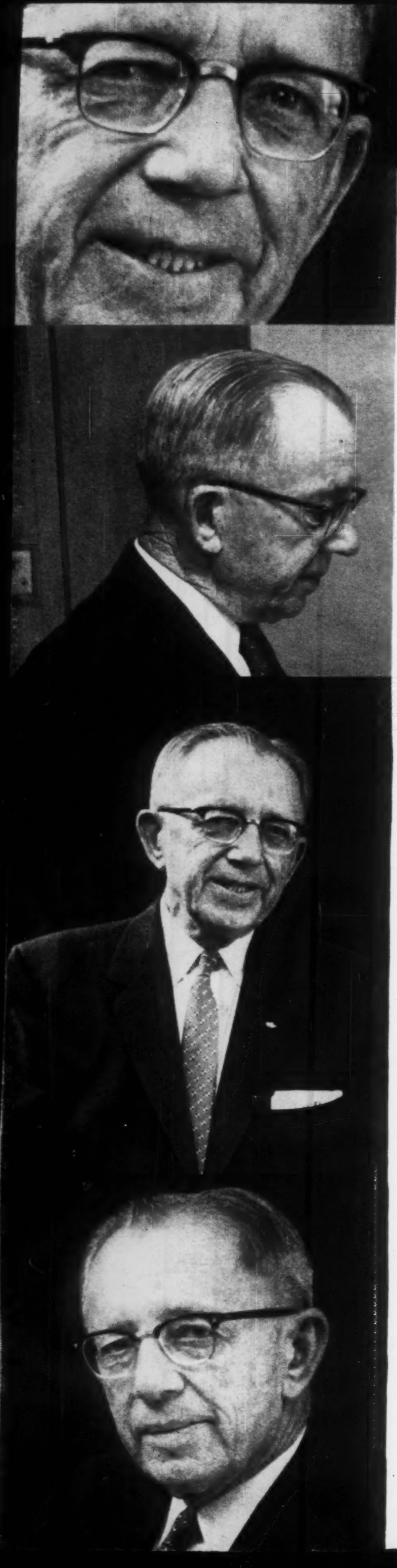
Extra Emphasis Feature

The Modern Office: Industry's New Profit Frontier 49
Big opportunities for better profits through faster, more efficient information flow are opening up for progressive companies. The keys: better facilities, new equipment, an integrated view of the "office" function. THOMAS KENNY

1. **Today's Office—Room for Improvement** 50
2. **How Much Mechanization Can You Use Profitably?** 52
3. **New Survey Highlights the Office in Transition** 54
4. **The Office: A Better Place for Better Work** 66
5. **Getting Down to Cases** 99
6. **New Horizons in Manning the Office** 115

Departments

Editorial: *Middle Management Power* 3
Voice of Industry 5
Washington Business Front 11
The Trend of Business 17
Business Failures 28
International Markets 122
Sales and Distribution 127
Inside Industry 131
Executive Bookshelf 136
Capital Views & Previews 145
The Reviewing Stand 152



"T-1" Steel gave us a 12½% payload advantage and helped boost business

says Mr. C. J. Bender, President, Trinity Steel Company, builder of LPG tank transports

Three years ago, the Trinity Steel Company of Dallas, Texas, built its first "blimp" transport from USS "T-1" Constructional Alloy Steel. It could haul 12½% more liquefied petroleum gas than other tank trailers of equal weight built of other materials.

Trinity Steel has built two new factories, one in Dallas and another in Mexico, to take care of its rapidly expanding business. Today, Trinity Steel is the largest single builder of "T-1" Steel blimp transports in the world. That's quite an achievement for a business that started in a mule barn.

The use of USS "T-1" Steel in the largest tanks cut weight to such an extent that 1,200 extra gallons could be hauled on each trip. This amounted to a bonus payload that paid for the "T-1" Steel in one season. After that the 1,200 extra gallons rode free—and earned a clear profit.

Trinity Steel was quick to advertise the advantages of USS "T-1" Steel in their sales literature and promotion. This was an important factor in the quick acceptance of the new blimp transport. Now they are making smaller units of "T-1" Steel that increase payload capacity as much as 50%.

Why not get the facts on what USS "T-1" Steel can do for you? It has three times the yield strength of structural carbon steel; has exceptional toughness, even at 50 degrees below zero; and has outstanding impact properties and excellent resistance to abrasion. In addition, it can be forged, welded, flame-cut and worked with the usual shop equipment. Write for a copy of our comprehensive "T-1" Steel booklet. United States Steel, Room 2801, 525 William Penn Place, Pittsburgh 30, Pa.

USS and "T-1" are registered trademarks

TRINITY
T-1 Mc Steel

United States Steel Corporation – Pittsburgh
Columbia-Geneva Steel – San Francisco
Tennessee Coal & Iron – Fairfield, Alabama
United States Steel Supply – Steel Service Centers
United States Steel Export Company

United States Steel

Editor . . . . A. M. SULLIVAN
Executive Editor . . . . . M. JOSEPH DOOHER
Associate Editor . . . . ROLAND MANN
Senior Editors:
Executive Methods Editor . . . KENNETH HENRY
Marketing Editor . . . . . . THOMAS KENNY
Employer Relations Editor . . ALFRED G. LARKE
Industrial Editor . . . . . . MELVIN MANDELL
Art Director . . . . CLARENCE SWITZER
Managing Editor . . . . ROY PAKANSKY
Production Assistant . . EDWARD W. GERLACH
Contributing Editors
PAUL WOOTON
ALEXANDER O. STANLEY
EDWIN B. GEORGE
ROBERT J. LANDRY
JOHN W. RIDAY
ROWENA WYANT
Business Manager . . . . VIOLA V. ANDERSON
Advertising Manager . . . . . . ALEX J. DUGHI
Circulation Director . WALTER F. GRUENINGER
Publishing Adviser . . . . . NORMAN C. FIRTH

DUN'S REVIEW AND MODERN INDUSTRY, September 1958, Vol. 72, No. 3. Published monthly by Dun & Bradstreet Publications Corp., J. Wilson Newman, President. Publication Office: 300 West Adams St., Chicago, Ill. Entered as second class matter at the Post Office, Chicago, Ill.
Correspondence for Editorial, Advertising, or Subscription Offices should be sent to Dun's Review and Modern Industry, 99 Church St., New York 8, N.Y.
Subscription: $5 a year in USA and Possessions, and Canada. Elsewhere, $10. Single copy, 75 cents. Please state title and employing company when subscribing.
Copyright 1958 by Dun & Bradstreet Publications Corporation. Copyrighted under International Copyright Convention. All rights reserved under Pan American Copyright Convention.
The title DUN'S REVIEW AND MODERN INDUSTRY is registered in the U.S. Patent Office. This magazine is indexed in the Industrial Arts Index, in the Public Affairs Information Service, and also by volumes in an index available upon request to the Editorial Office . . . Member ABC, SBME, and MPA . . . Printed in USA.

CREDITS: Cover, Clarence Carter; **page 5**, Devaney photograph; **page 33**, Magda Vassilov photograph; **page 36**, Culver Service photograph; **page 45**, Devaney photograph; **page 49**, Schnall photograph from Designs for Business, Inc.; **page 50**, Industrial Communications; **page 66, bottom left**, Culver Service photograph; **page 67, top left**, Chicago American; **page 67, top right**, Flournoy photograph from Virginia Chamber of Commerce; **page 67, center right**, Columbia Steel Equipment Company; **page 67, bottom right**, Schnall photograph from Designs for Business, Inc.; **page 71, top left**, Culver Service photograph; **page 71, top right**, Schnall photograph from Designs for Business, Inc.; **page 92, top**, General Electric Company, Nela Park Plant Division; **page 92, bottom left**, Consolidated Edison Company of New York, Inc.; **page 97**, Pittsburgh Corning Corp.; **page 120**, United Press Association; **page 145**, United Press photograph.

Editorial

Middle Management Power

THE TRAFFIC MANAGER complains that he can't get the ear of top management. So does the office manager. So does the plant engineer. All encounter deliberate road blocks at upper levels of management authority.

Why can't they tell their story to top management? Isn't "the brass" interested? Yes, indeed, but other problems, financial and administrative, have priority. Is the top man too busy? Yes, by his own estimate of time and responsibility. Should the "v.p. in charge of" handle the situation? Perhaps—but it may not always be wise to ask an executive to be judge and jury. Much depends upon the mental aperture of the veeps assigned to help carry the top executive burden.

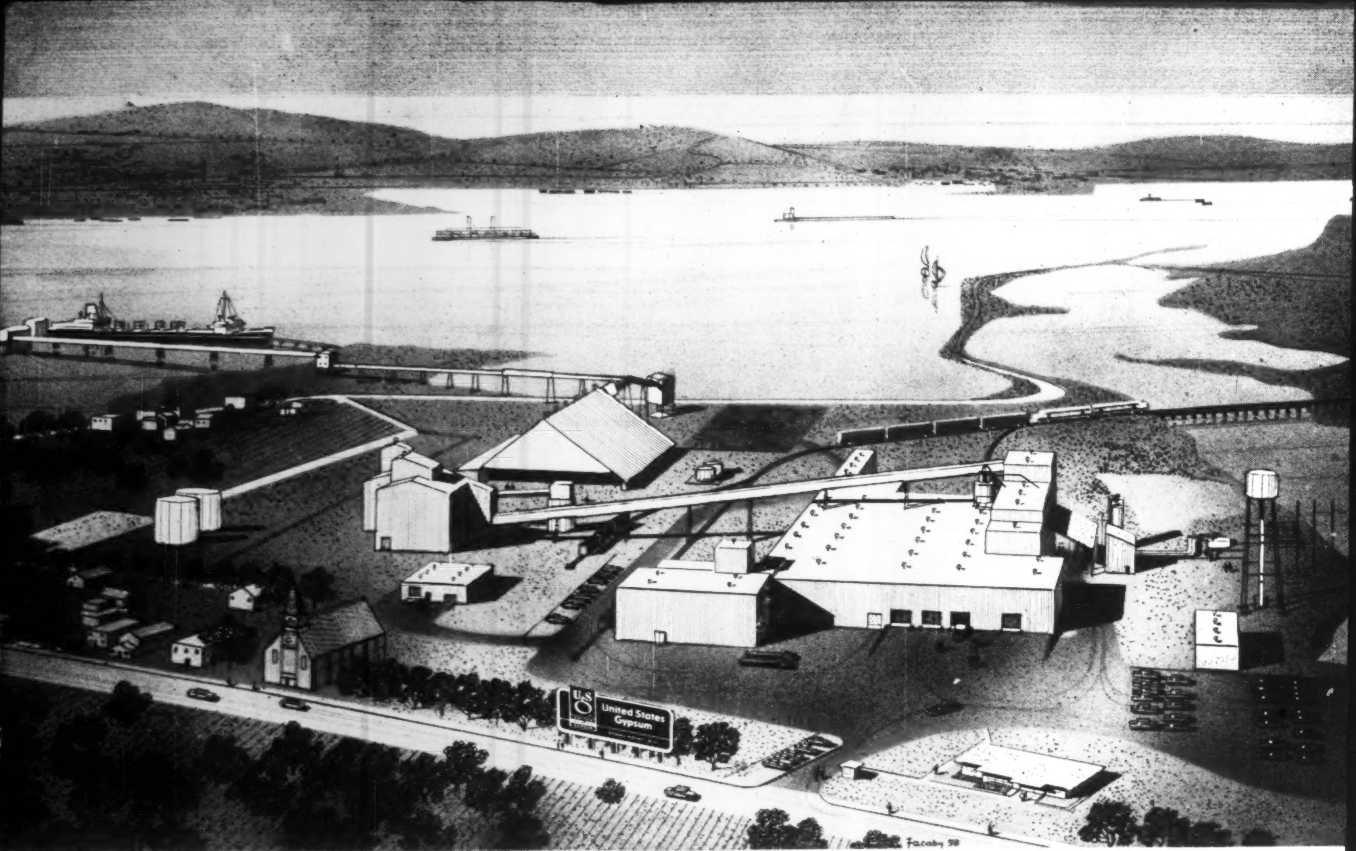
If the president surrounds himself with a palace guard whose duty is to fend off inquiry and smother suggestions with a smile, then middle management can only wander back to the desk frustrated. But if the men around the president have a topside view of the responsibility and are eager to overcome problems quickly without a loss in executive morale, they will know when to assume the burden and when to step aside.

Why shouldn't the middle men of management clamor for attention when they speak for the company welfare? The answer is frequently contained in one word—authority. When supervisory management is trained for a job, it should be trained to make decisions as well as apply techniques. When middle management is given enough liberty of action, it acquires mental and moral strength to meet situations and make decisions where policy has been defined and a budget established. Beyond these areas, top management must be informed and must define its purpose and scope.

When top management delays definition, limits authority, and penalizes the adventurous, then it invites slow rust. Acting on its own initiative, middle management will make mistakes, but the more it acts, the fewer the mistakes will be. It might even reach the point of making decisions on subjects where the top brass never had the information, foresight, or courage to take confident action. When top management hamstrings middle management because of its own confusion, vanity, or insecurity, then the business becomes a victim of mental mildew. Mistakes are the price of progress. A perfect performance in line management may be an inept performance if it reports no errors of judgment along the way.

When authority filters down through management levels, responsibility rises in a direct proportion in performance and progress. Able men rise to the opportunity, while others sink by their own dead weight. The best way to handle the middle management question is to give the executives on their way up a chance to find their own answers and be responsible for them. Why step on their fingers? The risk is small compared to the results to be achieved.

The Editors


United States Gypsum

U.S. Gypsum's new multi-million dollar plant in Stony Point, New York, at New York City's doorstep. A "Central" location served by land and sea transportation.

How New York Central helped U. S. Gypsum find "exact property" in heart of market

U.S. Gypsum had tough location requirements for a new building materials plant to serve the New York Metropolitan area.

In the first place, the site had to be close to the growing population centers where increased commercial and residential construction could be expected. Also, a supply of skilled labor was necessary. And in addition, convenient transportation by land and water was vital. Here's how these needs were met:

The New York Central plant-site experts assisted in pinpointing the ideal location—at Stony Point, on the shores of the Hudson River, at New York City's doorstep. On this site the New York Central could run tracks right to the plant. Deep-water frontage would let ocean-going vessels unload raw materials without transshipment. New York Central's Plant Site Consultants helped gather data on the market, labor, and taxes for U.S. Gypsum's management. They also supplied geological maps for foundations, worked out an alternate water supply, and arranged property options to help assemble all the necessary acreage.

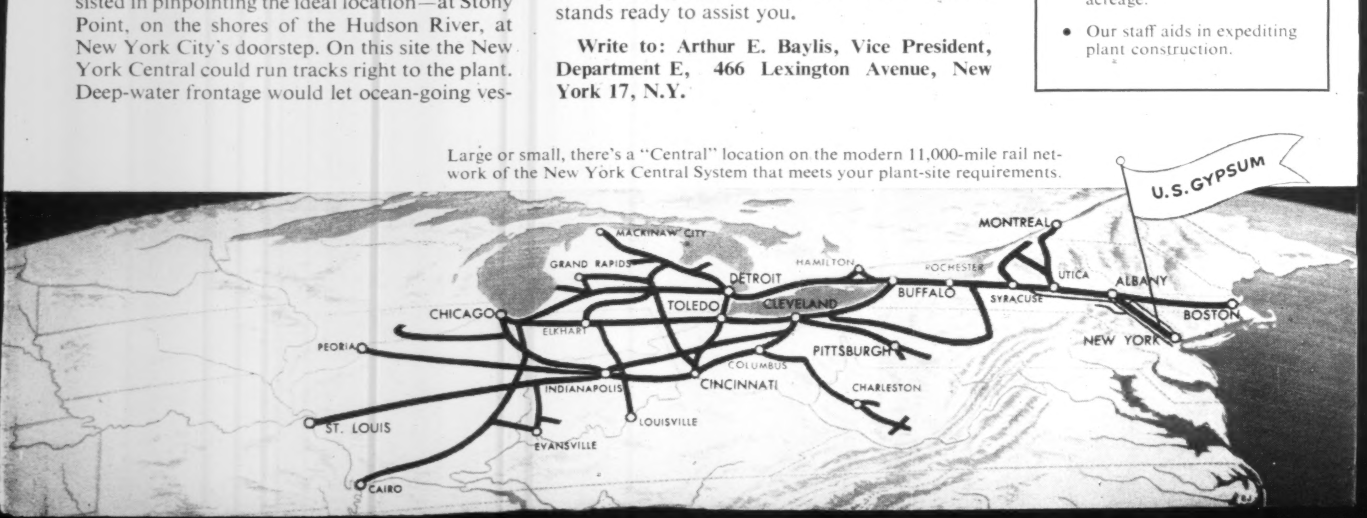
What the Central did for U.S. Gypsum, it can do for you. Here, under one roof, you will find a wealth of factual plant-site information. Whatever your special needs, New York Central stands ready to assist you.

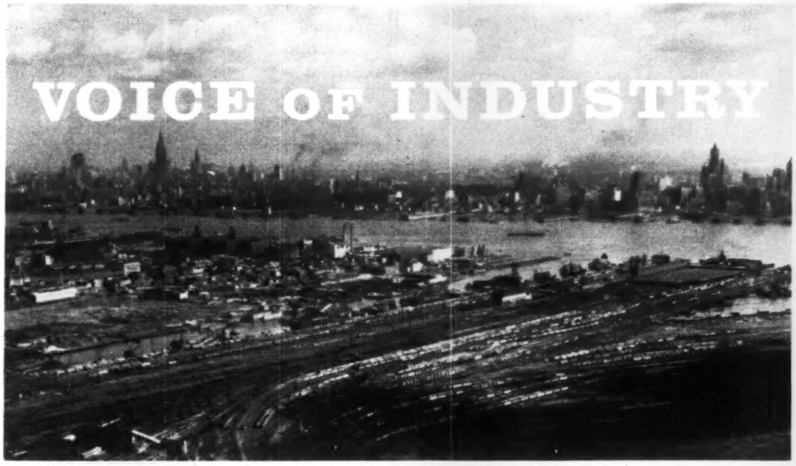
Write to: Arthur E. Baylis, Vice President, Department E, 466 Lexington Avenue, New York 17, N.Y.

New York Central can help you too!

- The services of our Plant Site Consultants, on a strictly confidential basis, are available without charge.
- Plant-site appraisal reports are tailored to your type of operation.
- We assemble the necessary acreage.
- Our staff aids in expediting plant construction.

Large or small, there's a "Central" location on the modern 11,000-mile rail network of the New York Central System that meets your plant-site requirements.


U.S. GYPSUM
MACKINAW CITY
MONTREAL
GRAND RAPIDS
HAMILTON
ROCHESTER
UTICA
DETROIT
BUFFALO
ALBANY
SYRACUSE
TOLEDO
CLEVELAND
CHICAGO
BOSTON
ELKHART
NEW YORK
PEORIA
PITTSBURGH
COLUMBUS
INDIANAPOLIS
CINCINNATI
CHARLESTON
ST. LOUIS
LOUISVILLE
EVANSVILLE
CAIRO



VOICE OF INDUSTRY

Winning the Production Race with Russia

ALSO: ***Business Men as Citizens; How Planned Pricing Benefits the Economy; Diminishing Executive Incentive***

We Must Modernize or Perish

JOHN K. HODNETTE, *executive vice president, Westinghouse Electric Corp., before the Southern Research Institute.*

Although American industry has gone through a tremendous expansion of production facilities since World War II, the economy now faces the problem of adjusting to this vast expansion in capacity. The problem is aggravated by the fact that costs and prices have been rising even though production, sales, and profits have fallen.

It is up to industry to do what it can to return costs and prices to the more normal relationship of a free market. But the basic problem is one of lowering the costs of production.

Much of American industry is not ready for the never-never land of full automation. Many segments of industry need routine mechanization—more efficient use of less expensive and more commonplace machines and concepts.

But the most important single effect of automation is bound up in the word "survival." If we are to compete as a trading nation and if we are to survive as a military power in a dangerous world, then we must call on every benefit and resource that automation can give us. We have no choice. If we hesitate, we might ponder the challenge flung at us by Nikita Khrushchev when he said, "The threat to the United States is not in the intercontinental ballistic missile, but in the field of peaceful production . . . and we will prove the superiority of our (Russian) system."

Executives Are Citizens, Too

PAUL W. SAYRES, *president, Paul Sayres Company, Inc., before the New York Board of Trade.*

Every business man is personally obligated to use his experience, his abilities and his best efforts to help improve the country and the world in which we live. If we do not do this for ourselves, the decision to do it, as well as all our other freedoms, will be taken from us by a society and form of government repugnant to all of us.

Just one business man in each community, tackling an important public

BIG JOE makes NEWS

By far...the LOWEST PRICED machine of its kind on the market...

$299

COMPLETE

We invite comparison

"THE 299"

- Complete bearing control throughout
- Synchronized 12-volt heavy-duty system
- Feather-controlled stops
- Equipped with automatic charger and heavy-duty industrial battery
- Self-alignment floor brake
- Lifting height 57", capacity 1,000 lbs.

Over 60 models from which to choose

Lifting heights to 160"; capacities to 3,000 lbs.

Write now for the complete master catalog number 659.

BIG JOE Hydraulic Lift TRUCKS

BIG JOE
MANUFACTURING COMPANY
Ralph Hines Road
Wisconsin Dells, Wis.

Your customer owns it now

When you ship, title passes, and your credit risk begins

At the time of shipping, you create an account receivable . . . and unless you have credit insurance . . . your insurance protection ceases. You lose control of the asset because title of the merchandise has passed. It is sound to insure your product while you own it . . . it is equally sound to insure it when your customer owns it . . . and owes *you* for it. Aggressive executives, through American Credit Insurance, continue protection of their working capital and profits invested in receivables. It is an important tool for constructive credit management. Our booklet on the many ways credit insurance contributes to financial security and sales progress should interest *you*. Write AMERICAN CREDIT INDEMNITY CO. of New York, Dept. 50, 300 St. Paul Place, Baltimore 2, Maryland.

Protect your capital and profit invested in accounts receivable with

American Credit Insurance

ANY ACCOUNT . . . NO MATTER HOW GOOD . . . IS BETTER WITH ACI

problem relating to his experience and background, can start a positive chain reaction which would mobilize the support of the people and of our government officials toward the solution of that particular problem. On the international level, the results of such action can reverberate, to our credit, around the world.

Most of us have a tendency to underrate our own powers of accomplishment outside the sphere of business. Let's not make that mistake. Let's put our abilities and influence and energies to work to preserve democracy.

We often lose sight of the fact that our government, whether local or Federal, welcomes our help and our thinking in problems affecting large groups of people or the nation as a whole.

Rx for a Sound Pricing Policy

NELSON C. WHITE, *vice president, International Minerals & Chemicals Corp., before the Chemical Buyers Group of the National Association of Purchasing Agents.*

There is probably no single area of industry's activities that is so misunderstood or so misrepresented as its pricing operations.

Most economists agree that "administered prices" are general throughout American business and that they are neither something new nor something intrinsically evil.

Leaders of industry have already gone on record with vigorous protests against the implication that "administered prices" are a form of price-rigging or restraint of trade.

If, individually, each company uses pricing as a means of attaining its corporate objective, the result is pricing by *policy*—by *plan*—and not by accident, and it does not stifle competition.

Price reductions should be made when possible. But they should be made only when they result from a price policy and improved efficiencies, and not when they are inspired by opportunistic, short-term motives.

Industrial management must constantly ask itself if its pricing policy also serves the goals of long-range progress and growth in the company, the industry and the economy. In other words, pricing policy must become an arm of corporate policy aiming at continued improvements in efficiency. These efficiencies, as attained, should be translated into more earnings for the investor, better wages for the employees and

LET US PLACE ON YOUR DESK **FREE...** THIS UNIQUE SCIENTIFIC STUDY* SHOWING

How Four Companies Saved Thousands of Dollars on Payroll Costs

AND INCREASED PRODUCTION AND PROFITS

A SIMPLE way for management to get more out of payroll dollars is demonstrated in a new study. Conducted independently, it scientifically measures the value of music by MUZAK.

Here, briefly, is what music by MUZAK accomplished in four cases:

CASE NO. 1 – An INCREASE of 8.03% in the productivity of clerical workers in the direct-mail department of Prentice-Hall, Inc., Publishers – producing a net yearly savings substantially in excess of MUZAK's modest cost.

CASE NO. 2 – A REDUCTION of 38.6% in typing errors in the accounts payable office of Lever Brothers Co.

CASE NO. 3 – Employee Turnover DECREASED 53.3% in the New York Reservations Office of Eastern Air Lines. Also noted: a 7 count improvement in the quality of worker performance.

CASE NO. 4 – An INCREASE of 18.6% in the key-punch production of the Mississippi Power & Light Co. Also noted: a 37% *decline* in errors, time required to process bills *decreased 16%*.

How MUZAK Affects Profits

These remarkable results are now detailed in an interesting booklet that will be sent without cost or obligation. It is called HOW MUZAK AFFECTS PROFITS.

It is a unique case book because (to the best of our knowledge) it includes the *first* statistically reliable management engineering studies that measure savings resulting from environmental changes in work areas. It explains the diversity of problems solved, the wide range of benefits available to management, facts and figures that may suggest a way to increase payroll savings and profits in your own company.

Four Unique Features That Make MUZAK Different from Ordinary "WORK MUSIC"

MUZAK has spent 20 years perfecting the *scientific* way to meet the minimum requirements of a successful work-music program. It brings you these four unique features that are needed to do the job:

YOU NEED A SPECIAL KIND OF MUSIC which is "heard but not listened to" – which stimulates without distracting.

YOU NEED SCIENTIFIC PROGRAMMING to suit the time of day, place, and type of work activity. MUZAK employs sound psychological techniques to counteract normal daily trends of worker fatigue, offset monotony, raise efficiency.

YOU NEED "CONTROLLED DYNAMICS" to penetrate noise barriers, mask out unwanted noise, without becoming distractingly loud.

YOU NEED A COMPLETELY AUTOMATIC SYSTEM which avoids the cost of assigning personnel to it. A flick of the switch starts MUZAK.

These four major MUZAK *"exclusives" tell you why ordinary "background music" just cannot accomplish what* MUZAK*'s scientifically planned service can do for you.*

*MUZAK—Reg. U.S. Pat. Off.

FREE COPY – "How MUZAK Affects Profits"

This unique book includes scientifically measured effects of MUZAK on productivity, accuracy, turnover, quality of work – savings and profits. It is yours for the asking. Simply mail the coupon and you will receive a copy without cost or obligation of any kind. MUZAK *Corporation, Dept. 59,229 Fourth Ave., New York 3, N. Y.*

MUZAK Does So Much . . . For So Many Kinds of Business

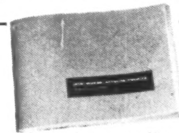
FACTORIES AND PLANTS note a definite improvement in production and efficiency. They also report less internal friction.

BANKS find it pays to provide MUZAK both to customers and to employees. It creates a "nice to do business here" atmosphere . . . and, by relieving Worker Tension, aids concentration of clerical workers.

OFFICES find that MUZAK relieves the tensions caused by "noise fatigue" in rooms filled with the clatter of office machines. MUZAK penetrates noise barriers, masks out unwanted sounds.

MUZAK is transmitted automatically from MUZAK studios in principal cities. Spot installations available for remote locations and TRAVEL MUZAK for trains, planes, ships and busses.

MUZAK and TRAVEL MUZAK
Reg. U.S. Pat. Off.



* A UNIQUE CASE BOOK

The first three studies included were conducted by the Management Engineering Firm of STEVENSON, JORDAN & HARRISON, INC. Its investigations were conducted without influence or interference by MUZAK Corporation and under study conditions satisfactory to the survey consultants. The *fourth study* was independently made by an executive of a large southern public utility. These studies recognize the fact that no two work groups are alike. Therefore, wherever possible, in each of the studies measurements were made of groups comprised of the same individuals both before and after the introduction of MUZAK.

MUZAK Corporation, Dept. 59,
229 Fourth Avenue, New York 3, N. Y.

Please send me free and without obligation a copy of "How MUZAK Affects Profits."

Name.................................Position...............

Company..

Type of Business.......................No. of Employees..........

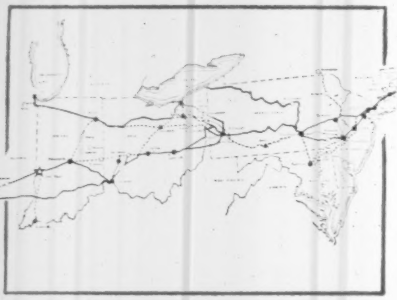
Street...

City & Zone..............................State..........

☐ Check here if you also wish to receive *free* a copy of *"An Answer to Worker Tension."*

If you are interested in a Muzak franchise, please write for further information.

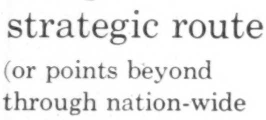
If when is a factor in shipping
(with on-time delivery essential)



If where is anywhere along this strategic route
(or points beyond through nation-wide interline connections)

If how to assure careful handling is a problem

...ship by dependable *(and low cost)* modern motor carrier



Eastern
EXPRESS, INC.
General Offices: 128 Cherry Street, Terre Haute, Indiana

Connecting the Midwest with the Eastern Seaboard: Akron • Baltimore • Bethlehem Bridgeport • Chicago • Cincinnati • Cleveland • Columbus • Dayton Evansville • Fort Wayne • Harrisburg • Indianapolis • Jersey City Metuchen • Philadelphia • Pittsburgh • St. Louis • Trenton • Zanesville

lower prices and better products to the general public.

The same policies should be applied with equal vigor in purchasing operations. Pricing policies and purchasing policies should be compatible. Both simple morality and sound business practice demand that we should not operate under one set of rules as sellers and under another set of rules as buyers.

A Tax on Executive Excellence

CRAWFORD H. GREENEWALT, *president, E. I. du Pont de Nemours & Company, in the McKinsey Foundation Lectures of Columbia University's Graduate School of Business.*

It is an extraordinary thing that, in a nation devoted to free enterprise, we deny in one breath the very attributes we uphold in another. We admire success, but penalize the successful; we cry for talent, but tax away its rewards; we boast about our venturesome past, but, to today's risk taker, we say we'll not help you if you fail, and if you succeed, we'll take the lion's share. We protest the importance and vitality of small business—and we tax away the risk capital which would ordinarily serve to support it.

The effect of taxation on individual incentive cannot fail to be profound. I doubt that we feel it yet, for, through loyalty, interest, or perhaps sheer force of habit, today's executives will do their best regardless of their net reward. Perhaps this momentum will carry through the next generation and even the one after that. But, sooner or later, the difficult road to high executive competence will seem less worth the effort.

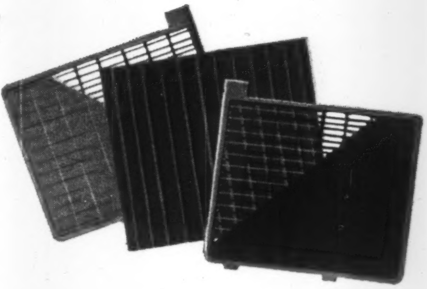
Spiritual satisfaction, power, prestige, admiration, applause, money—we need them all—for the reward to the individual is negligible when compared with the benefits the nation reaps from his competence.

The attrition of financial reward poses a special problem for corporate management. For it has a clear responsibility to see that business in 1985 will be at least as well managed as in 1958.

Many companies have tried to meet the situation by some form of nonmonetary reward which, in itself, is a recognition of the fact that gross income has declined in its attractiveness.

I have little faith in the fruitfulness of such alternatives. In the long run, business must rely upon the coin most suitable to its nature and this, in the end, is most effective in money.

Serving the Storage Battery Industry



EAGLE-PICHER / Manufacturer's Manufacturer

Richard Black

Few people think of the many safety, comfort and convenience features made possible in their car by its storage battery. But such items as the starter, lights, turn signals, horn, radio and heater put terrific strain on a battery.

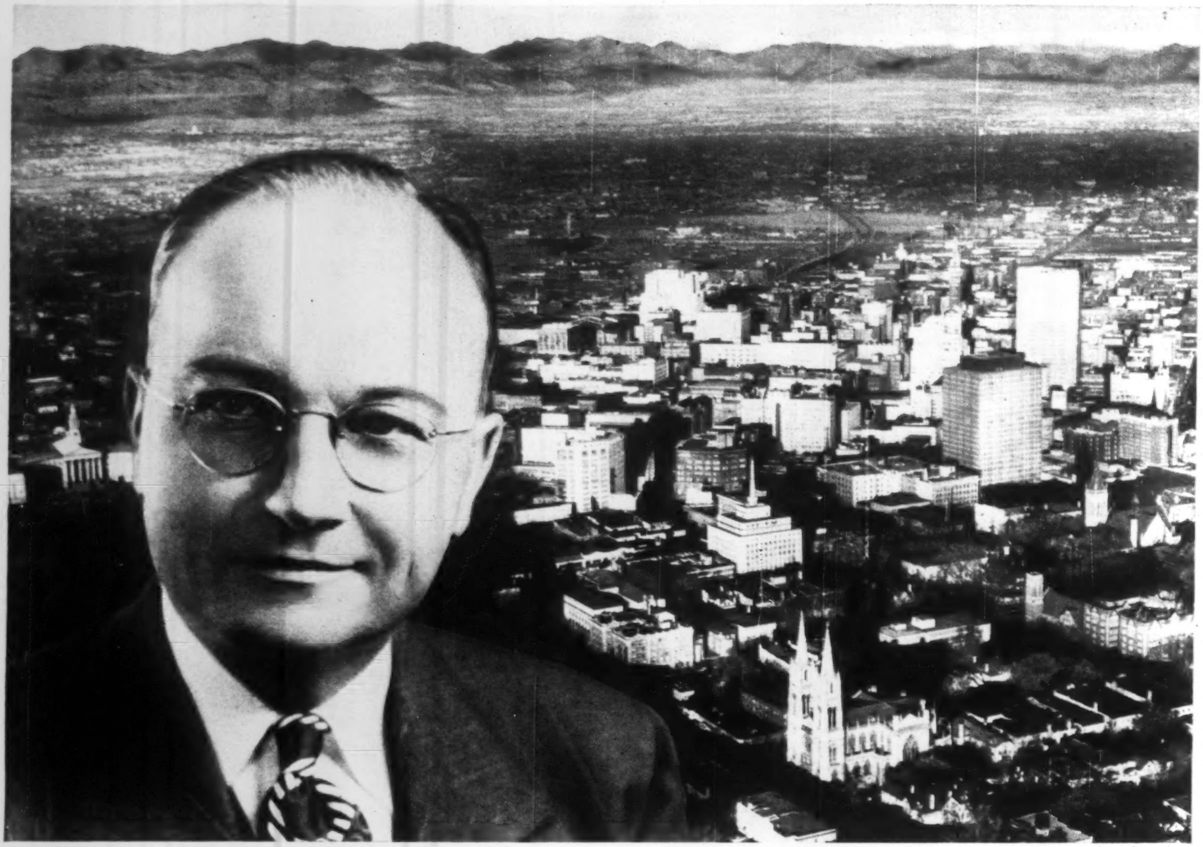
Constant improvements on batteries have been necessary to make them carry this heavy load at any temperature—improvements that could only come from continuing research such as that carried on by Eagle-Picher to produce better lead oxides and to find improved ways of using them in storage batteries.

We *specialize* in producing raw materials and component parts for *other manufacturers*, and work effectively with leading battery manufacturers in developing batteries with greater capacity and with longer, more dependable life.

As a "manufacturer's manufacturer," Eagle-Picher also serves such varied industries as food packaging, petroleum, electronics, automotive, agriculture, steel, ceramics, appliances and many others. Over the years we have proved in these industries that our manufacturing and research techniques successfully supplement those of our customers.

EAGLE EP PICHER

SINCE 1843 • THE EAGLE-PICHER COMPANY, GENERAL OFFICES: CINCINNATI 1, OHIO



M. H. Booth, Assistant Traffic Manager, Denver, Colorado

There's room for you in

ROCK ISLAND COUNTRY—

for example

THE DENVER GATEWAY

. . . where business expands and profits. The climate in Denver is as right for business as it is for living. With firm after firm recognizing this fact, Denver is being called the city of industrial opportunity. If you, too, are considering this expanding gateway to the West for a new location, M. H. Booth of the Rock Island can show you select industrial land just 5 miles northeast of town.

This Rock Island-owned land fronts on a new U. S. freeway in two adjacent sections: Airlawn, a 151-acre tract, and Sandown, totaling 46 acres. It is ideal for industrial use, is zoned for both heavy and light industry. All utilities, water, gas, electricity, and sanitary and storm sewers are in. Equally important, it is linked to the Midwest on one hand, to rich Pacific Coast markets through connecting lines on the other, by the Rock Island Railroad.

Mr. Booth and his Industrial Development staff have full information about Airlawn and Sandown sections for you. His group is typical of Rock Island specialized personnel, who, during 1957, helped locate 377 industrial installations along Rock Island tracks – a total investment by private industry of $404 million. He'll welcome your inquiry. Write:

Rock Island

Industrial Department 102

ROCK ISLAND LINES

La Salle Street Station, Chicago 5, Illinois

WASHINGTON Business Front

JOSEPH R. SLEVIN

WASHINGTON, D.C.—The Fall election campaign is just beginning to get under way, but there is general agreement in this political city that the new Congress that meets in January will be more liberal than the one that departed in August. Some experts think the shift will be small. Others say it will be substantial. But key leaders in both parties are convinced that it will take place.

The Democrats, to a man, are confident not only that they will retain their control of the Senate and the House but that they will increase their majorities in both bodies. Most Republicans sorrowfully accept the Democrats' appraisal. Some think the Democrats may do no more than hold their present margins, but any Republican who suspects that the GOP will recapture control of Congress is keeping his notions to himself.

Drift from the right

The shift toward a more liberal Congress will increase the prospects for enactment of social welfare legislation, will bolster the proponents of foreign aid and reciprocal trade, will make further increases in Federal spending likely, and will weaken the already dim chance of an early tax reduction.

The off-year election tradition will be on the side of the Democrats in November, for the party that is in power customarily increases its Congressional strength at mid-term. Politicians don't give the Republicans more than an outside chance of upsetting tradition.

The issues appear to favor the Democrats, too. The Republicans have an unexpected farm boom going for them. But the Democrats have the recession and have come up with a surprise of their own in the Adams-Goldfine case, which tarnished the Eisenhower "crusade" and made it certain that Republican blasts against Truman Administration scandals won't have the same force that they had in 1952, again in 1954, and once again in 1956.

The business pick-up has cheered Republican tacticians from Vice President Nixon on down, but the consensus of seasoned political analysts is that the GOP can't repair all the damage that the recession did to its election chances. They declare that a continuing improvement in business activity will do no more than give the Republicans an opportunity to cut their losses.

Weighing the losses

Guesses as to the size of the Democratic gains range from three to ten additional seats in the Senate and from fifteen to thirty-five in the House. Liberal Democrats now in Congress are chortling with delight at the prospect. The newcomers will be from the North and many will be members of the party's liberal wing. Their arrival will force the Congressional Democratic leaders to tailor their policies more to the liking of the liberals among their colleagues. House Speaker Sam Rayburn of Texas and Senate Majority Leader Lyndon B. Johnson of Texas will shift as their party's complexion in Congress shifts.

The prospect that the 86th Congress will be more liberal than its predecessor comes as the continuation of a trend that has been under way for a number of years. The liberals have gained steadily in representation and in committee influence during the past decade. This is not to suggest that Congress has outraced the mood of the country.

No sudden shift

The change within Congress has been moderate and reflects the temper of a prosperous, somewhat complacent, somewhat self-indulgent middle-class democracy.

The shift has taken place in Republican as well as Democratic ranks. The older legislators who hated FDR and detested the New Deal are disappearing. The Republican Party of Robert A. Taft is no more, and the influence of the Taft bloc in Congress diminishes with every election.

The roster of Republican conservatives who are ending their service this year makes it plain that the new Congress will be to the left of the old even if the Democrats fail to increase their margin of control and fail to unseat any of the Republicans who are standing for re-election. The Senate, for example, will lose Minority Leader William F. Knowland of California—the man who aspires to replace Taft as the national leader of the right wing. It will also lose Pennsylvania's rigidly conservative Edward Martin and Indiana's William E. Jenner, best remembered as the McCarthy supporter who called Gen. George C. Marshall a front man for traitors. Both Martin and Jenner, incidentally, are members of the Finance Committee. At the other side of the Capitol, close to a dozen of the GOP's most conservative members will leave the House this year.

The new agenda

It would be premature to say that one measure or another will become law in a more liberal Congress but it is clear there will be greater support for:

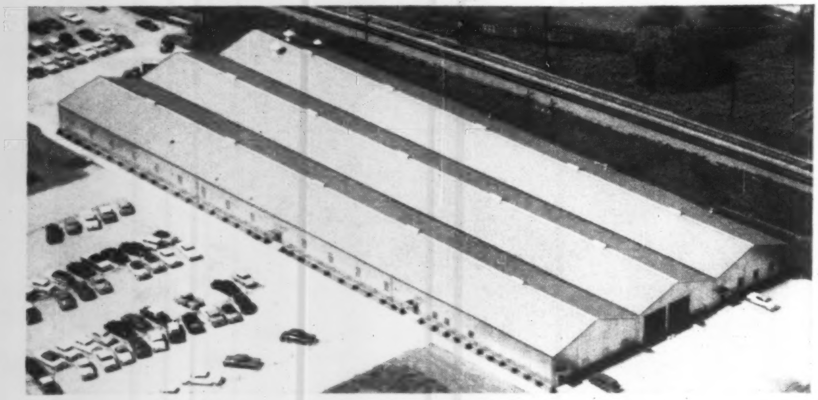
- Federal aid for school construction.
- A more generous Social Security program — possibly including medical benefits.
- Broader minimum wage coverage and a higher wage floor.
- A bigger public housing program.
- Tax concessions to lower income groups.
- Tougher antitrust laws.

A more liberal Congress will be more willing to spend and will be less concerned than the 85th Congress about the menace of big deficits. It will be more disposed to fret about high interest rates and will be less inclined to support the tight money policies that the Federal Reserve System believes will be needed to prevent inflation.

Defense Department ordering and spending policies aggravated the business downturn, but now they are playing an important role in bolstering the recovery push. The Pentagon added to the severity of the recession during the early stages by sharply slashing the rate at which it was ordering hard goods. The Department didn't plan it that way, but the opening months of the recession coincided with a reassessment and a rephasing of the military procurement program. New buying orders slumped to $2.149 billion in the July-September

Beat the high cost of construction with a modern Armco Steel Building

Modern Armco Steel Buildings in more than 5000 different sizes provide the custom-tailored buildings you need at a big saving. They are attractive, weathertight, fire-resistant, require minimum maintenance.



Here's how Armco Steel Building construction provides the buildings you need and saves you money and time.

1. Precision-made parts of your building are delivered right to your site, ready for assembly. Parts fit exactly; no waste materials. Erection service is available.
2. Fast assembly slashes construction costs and time. Panels lock together to form a permanent, weathertight, noncombustible structure requiring minimum maintenance. Easy to insulate—an important money- and time-saving feature.

Attractive in themselves, Armco Steel Buildings can also be given architectural treatment outside, any desired finish inside. Mail coupon for complete information.

Armco Drainage & Metal Products, Inc.
708 Curtis Street, Middletown, Ohio
Send me more information on Armco Steel Buildings for the following uses:
____
Approximate size ________________
Name ________________
Company ________________
Address ________________
City ________________ Zone ________ State ________
FINANCING ARRANGEMENTS AVAILABLE

ARMCO STEEL BUILDINGS

ARMCO ®

quarter of fiscal 1958, then picked up to $3.854 billion in the October-December quarter. They jumped to $4.395 billion in the January-March quarter and then to $5.991 billion in the closing three months, as the Pentagon rushed out orders to make up for the shortfall at the beginning of the year. The new contracts strengthened business activity in the Spring and early Summer, for defense contractors bought materials and parts as fast as they got the go-ahead sign from the Pentagon.

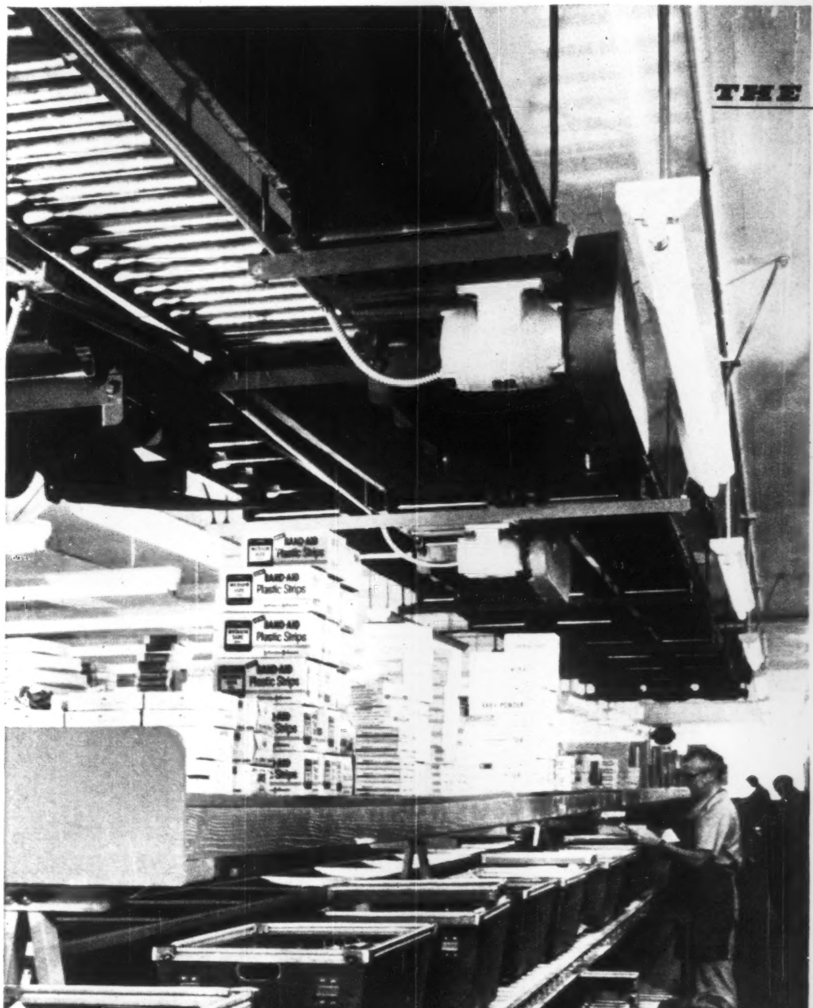
Defense spending prospects

A big upsurge in military buying is not in the cards unless the international situation worsens but defense purchasing will rise slightly and will stay high throughout this fiscal year. Present plans call for ordering $17 billion of hardware this year against $16.4 billion in fiscal 1958.

Pentagon planners are striving for a smooth, steady order flow. They figure that a constant flow of new business will eliminate uncertainties and assure contractors that they can go ahead with their own purchasing and expansion plans. Present plans are for placing $4 billion to $4.5 billion of orders in each of the four quarters. Military spending is scheduled to rise slowly but surely throughout fiscal 1959 to a peak in the April-June quarter. Total outlays for the year are due to climb more than $2 billion above the $39 billion fiscal 1958 volume.

Businessmen can count on the Government this year to give them a crack at buying an ample supply of securities for tax reserve investments. The Treasury learned a bitter lesson in mid-June when the lack of a maturing issue of tax anticipation certificates greatly unsettled the money market just at the time when it was trying to absorb huge speculative purchases of new Government bonds. The Treasury sold a $3.5 billion issue of March 1959 tax certificates in late July and can be expected to follow through with an offering of tax securities that will mature next June.

Government economists say the big test of the business upswing is getting under way this month. Business activity customarily expands in the Fall but what Administration advisers want to know is how strong the rise will be. The pick-up will have to be bigger than a normal Fall gain if the economy is to stay on the road back to full employment. One big question mark hovers above the automobile industry and its new 1959 model cars. Others hang above home construction, business inventory policies, and capital expansion programs. Substantial inventory purchases coupled with an early reversal of the capital goods decline would bury the recession for fair. END

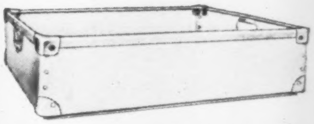


THE NATIONAL SCENE

MEET A MATERIAL . . .

SO SHOCK-ABSORBING IT TAKES A LIFETIME OF SLAM-BANG ABUSE

Bumping along conveyors, slammed together on trucks and dollies, these Kennett materials-handling containers take a beating. But they stay on the job for years without cracking or breaking—and keep fragile parts from damage—because they're made of rhino-tough, resilient Vulcanized Fibre. That's not surprising. You *expect* rugged strength in Vulcanized Fibre. The surprising—and important—thing is Vulcanized Fibre's versatility. Prove this for yourself. Send for our new kit of samples and give them your toughest tests. We'll bet on your finding a product-improving idea. Others have been doing just that—for 99 years.



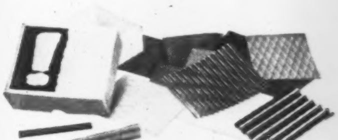
Here's the container that shrugs off abuse

Vulcanized Fibre is one of the strongest materials, per unit of weight. Yet it weighs less than half as much as aluminum. It's just the right material for materials handling receptacles. But it might raise your eyebrows to know a few of its other uses: delicate surgical instruments, chemically inert suture reels, arc chutes for lightning arrestors, flexible backings for abrasive disks, torque-resisting cams and gears, glass-smooth armor for textile shuttles, insulation for railroad signal relay systems. The list of applications is virtually endless.

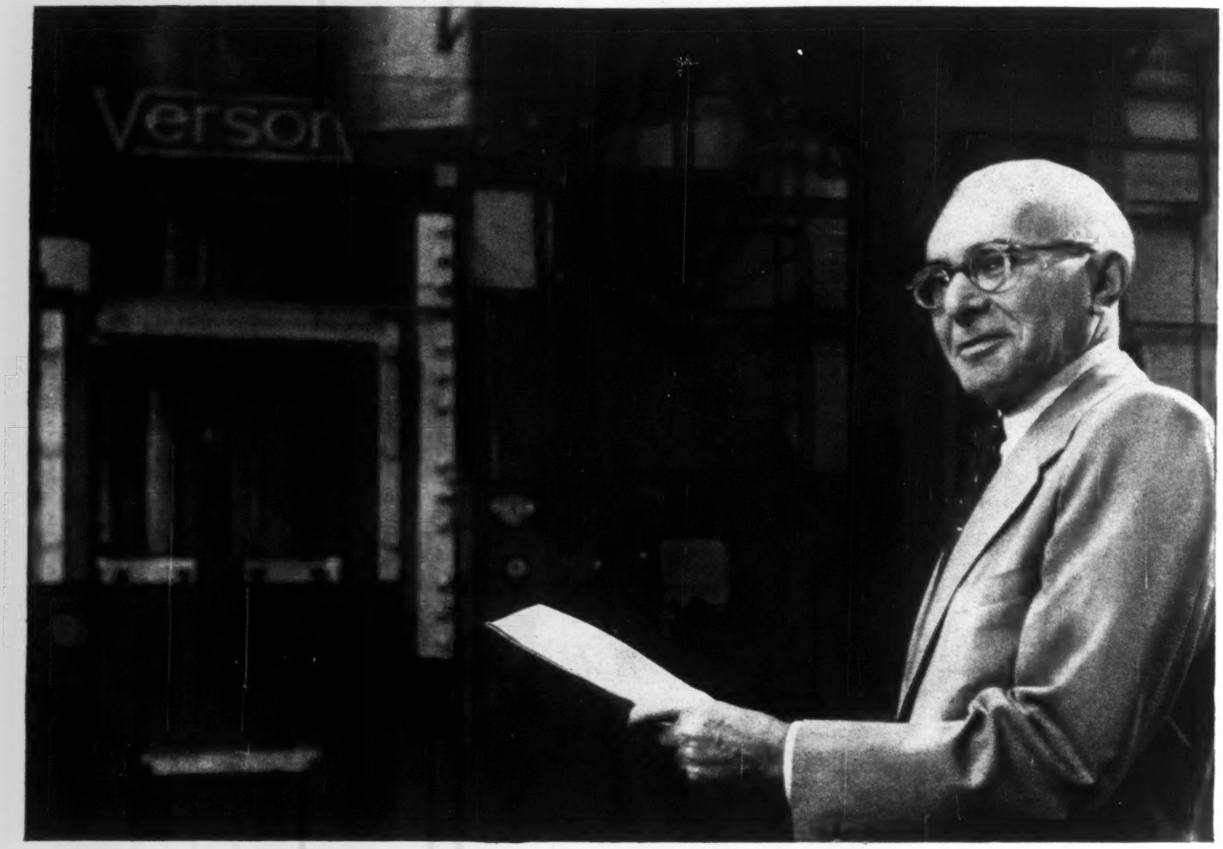
In addition to light weight Kennett Receptacles, our own Lestershire Textile Bobbins are made of rugged, resilient, non-snagging Vulcanized Fibre.

Among engineering materials, Vulcanized Fibre is outstanding and surprisingly low in cost. It has superior arc resistance, low thermal conductivity, excellent resilience and high abrasion resistance. It can be formed or deep drawn into intricate shapes—and machined, polished, painted, embossed and combined with other materials, such as laminated plastic, aluminum, wood, rubber or copper!

Send for samples today. Let us know what use you have in mind. And if you want more information on Kennett Receptacles, ask for our booklet "Materials in Motion." Write Dept. I-9.



NATIONAL
VULCANIZED FIBRE CO
WILMINGTON 99, DELAWARE
In Canada:
NATIONAL FIBRE COMPANY OF CANADA, LTD., Toronto 3, Ontario



"Heller working funds increased our profits—speeded our growth—helped us to financial independence"

Says Mr. David Verson, President, Verson Allsteel Press Company, Chicago

David Verson, President of Verson Allsteel Press Company, one of the world's leading manufacturers of metal forming presses, says that a Heller working fund program enabled his organization to capitalize on expansion and profit opportunities.

"At a time when no other financing institution was even willing to give us consideration, Heller indicated a degree of confidence which found expression in advances in excess of what was warranted by our financial position at the time. As the direct result of this support, we were able to accelerate our research and production and install modern labor saving machinery to fulfill a demand for our product far in excess of anything we could possibly have anticipated.

Without Heller funds, we would have been compelled to dilute our ownership and share our profits which have increased many times over. Heller advice and counsel during our formative period proved invaluable to us."

Today, Verson Allsteel Press Company is a multi-million dollar company manufacturing presses that range in size from small units to specialized giants that handle 75 foot steel sections. Verson is no longer a Heller client but, like thousands of other past Heller clients, has been helped to financial independence and increased profits through a Heller modern financing program.

How about your own company? Are you in the position of passing up growth and profit opportunities because you lack the cash to do the things you want to do?

If your company does an annual volume of $300,000 to $20,000,000 or more and can strengthen its operating position or increase its profits, investigate the story of Heller modern financing services today. Write for a copy of "Operating Dollars for Every Business" or for specific information pertinent to your own situation. Your inquiry will be treated in confidence and without obligation.

Capital and
Surplus over
$27,000,000

WORKING FUNDS FOR INDUSTRY

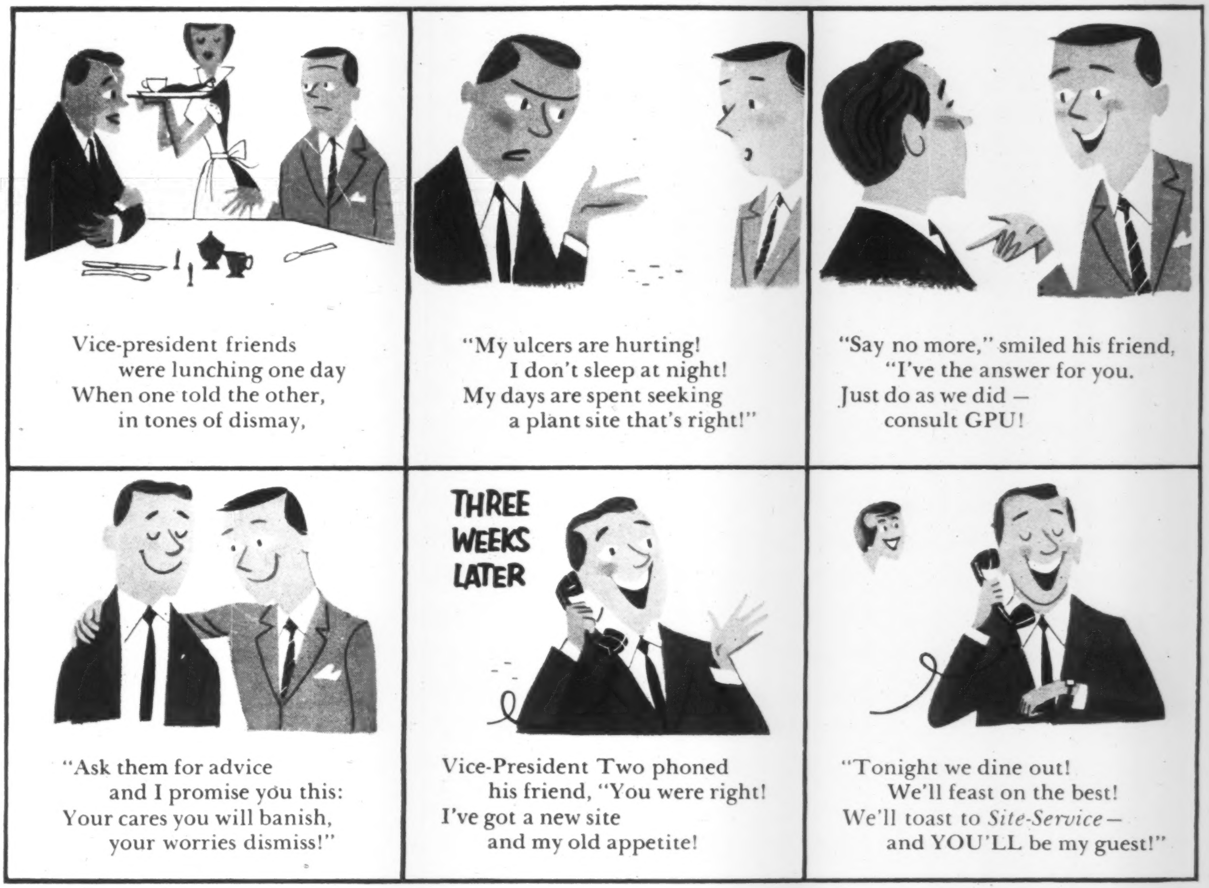
Write Dept. D.R. 9

Walter E. Heller & Company

105 W. Adams St., Chicago 90, Illinois
342 Madison Avenue, New York 17, New York
44 Broad St., N. W., Atlanta, Georgia

How to be Happy although a Vice-President

OR, BANISHING CARE AND WORRY WITH GPU *Site-Service**


THREE WEEKS LATER

Vice-president friends
were lunching one day
When one told the other,
in tones of dismay,

"My ulcers are hurting!
I don't sleep at night!
My days are spent seeking
a plant site that's right!"

"Say no more," smiled his friend,
"I've the answer for you.
Just do as we did –
consult GPU!

"Ask them for advice
and I promise you this:
Your cares you will banish,
your worries dismiss!"

Vice-President Two phoned
his friend, "You were right!
I've got a new site
and my old appetite!

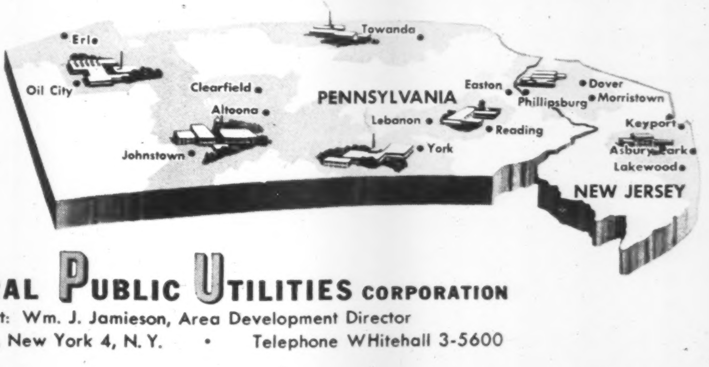
"Tonight we dine out!
We'll feast on the best!
We'll toast to *Site-Service*–
and YOU'LL be my guest!"

* ***First in the Field with the Facts!*** The one central source of plant site information for nearly half of Pennsylvania and New Jersey.

SITE-SEEKERS' FRIEND! The information and facilities of GPU *Site-Service* are yours for the asking. Your request by wire, mail or phone will receive immediate, confidential attention.

GPU ELECTRIC POWER COMPANIES

Metropolitan Edison Co.
Pennsylvania Electric Co.
New Jersey Power & Light Co.
Jersey Central Power & Light Co.


Erie
Towanda
Oil City
Clearfield
Altoona
Johnstown
PENNSYLVANIA
Easton
Phillipsburg
Dover
Morristown
Lebanon
Reading
York
Keyport
Asbury Park
Lakewood
NEW JERSEY

GENERAL PUBLIC UTILITIES CORPORATION

Att: Wm. J. Jamieson, Area Development Director
67 Broad St., New York 4, N. Y. • Telephone WHitehall 3-5600

DR-2

ANOTHER RYERSON PLUS: Inventory Control

"Steel inventory problems? Ryerson solved them..."

You can pass your steel inventory problems on to Ryerson, too. When Ryerson carries your steel inventory, you profit several ways. You reduce your "cost-of-possession" factor . . . increase your material selection flexibility . . . and assure a ready, steady flow of material to meet production needs.

Ryerson will help you plan inventories of such materials as carbon, alloy and stainless steels . . . bars, structurals, plates, sheets and tubing . . . aluminum and industrial plastics. With Ryerson as your source, you store and handle only a safe minimum of material to meet your needs.

With Ryerson inventory control you can make design changes or revise production, with less inventory risk. Ryerson—with strategically located plants and unlimited stocks—stands ready to deliver the exact steel you require when you need it.

A call to the nearby Ryerson plant will bring you the profitable details on how Ryerson can help you with steel inventory problems.

RYERSON CERTIFIED QUALITY

RYERSON STEEL®

Member of the INLAND® Steel Family

Principal Products: Carbon, alloy and stainless steel—bars, structurals, plates, sheets, tubing—aluminum, industrial plastics, metalworking machinery, etc.

JOSEPH T. RYERSON & SON, INC. PLANTS AT: NEW YORK • BOSTON • WALLINGFORD, CONN. • PHILADELPHIA • CHARLOTTE • CINCINNATI • CLEVELAND DETROIT • PITTSBURGH • BUFFALO • INDIANAPOLIS • CHICAGO • MILWAUKEE • ST. LOUIS • LOS ANGELES • SAN FRANCISCO • SPOKANE • SEATTLE

The Trend of Business **. . An action report on the U.S. economy**

Signs of Upturn Now Plainer

ALTHOUGH THE effects of the vacation lull were felt as usual this Summer, business men were heartened by reports that over-all business activity had not reverted to the low point of last April. This indicates that a recovery is now under way, with business expected to pick up gradually for the rest of the year and gain momentum in the first half of 1959. Although some attribute the improvement to the Middle East crisis, more think it would have happened anyway.

Here are the prospects at present:

Manufacturers' orders will edge steadily upward in the Fall months, sparking a gradual rise in industrial production. Most business men will complete their inventory cutting this Fall, and some will begin reaccumulation before the end of the year.

Personal income in the fourth quarter will set a new record, and consumer buying will hover around year-ago levels. Unemployment totals will continue to exceed those of last year for the rest of 1958, but the year-to-year increases will narrow.

Corporate profits will pick up somewhat in the fourth quarter, but they will remain noticeably below last year's figures. These declines from 1957 will continue to discourage most business from increased spending on new plant and equipment until well into 1959.

New inflation talk

Now that business conditions have definitely improved and the recovery has begun, business men and economists are becoming more concerned with the possibility of more inflation. Although there was no real deflation during the recent downturn, wholesale prices did decline and consumer prices leveled off during the Summer.

As industrial production, consumer buying, and Government spending pick up in the Fall, wage-price pressures will reassert themselves and a creeping inflation will again plague the economy. The wage-price spiral will gain momentum by mid-1959, but the rise will be less severe than the one that occurred between mid-June 1955 and mid-June 1956.

Increased Government spending for defense has brought the prospect of a $12 billion to $13 billion deficit in the Federal budget next year. This will mean Treasury financing through commercial banks, which will require additional use of Federal Reserve System reserves. Increased reserves will encourage loans to business, another stimulant to inflation.

A Treasury deficit will also mean continued high corporation taxes, and increases in other costs will prompt business men to raise prices to maintain profit levels. Although actual corporate profits will improve by the end of the year, the total for all 1958 will be sharply below 1957, and there will be a substantial loss in Government revenue in consequence.

In contrast, higher personal incomes will help increase Government revenue for the rest of the year. A rise in wage and salary disbursements will boost personal income to a record annual rate of about $130 billion by the end of the year, moderately above the peak of August 1957.

Consumer prices take a breather

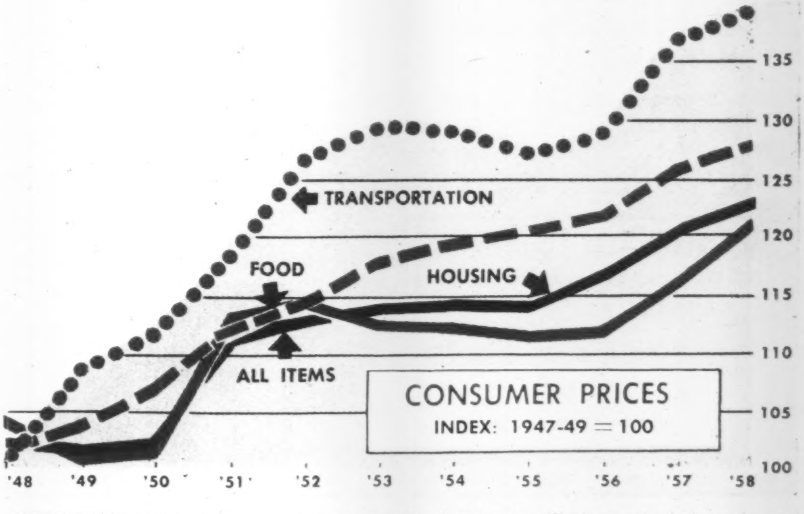
Although consumers were confronted with higher prices on some services and transportation this Summer, costs of food, housing, and apparel were steady. This leveling off will continue until about mid-Autumn; then most prices will be edging up well into next year.

There will be a moderate dip in food prices at retail in early Fall as record harvests reach the market, but prices of processed foods will decline less than the average and will rise faster once the trend is reversed.

Despite a slight rise in prices, higher personal income and encouraging business news will stimulate consumer spending, which will match or slightly exceed the corresponding 1957 figures for the rest of 1958.

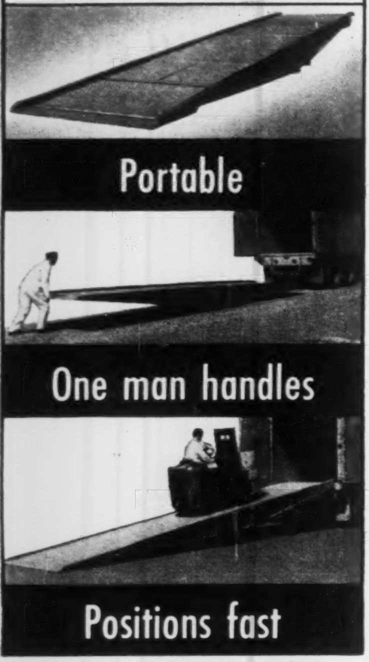
Retail trade held up well during the Summer. Volume was close to the record levels of July and August 1957. Spending on household goods improved substantially, and this trend will continue through the fourth quarter. There will be more interest in big-ticket appliances, particularly refrigerators and automatic laundry equipment. Rising furniture sales will match last year's levels.

An upsurge in the buying of apparel is in prospect, and sales will be comfortably above those of the similar 1957 period during the fourth quarter. This will be especially true of women's apparel since new styles will stimulate consumer interest.



MORE PRICE RISES: *Prices on the above and other items will rise again before the end of the year lifting the Bureau of Labor Statistics' consumer price index over last year's.*

Magcoa magnesium Yard Ramps



like having an extra dock

- No further need for loading dock
- Portable and light—can be maneuvered into place by one man
- Load and unload when you choose, where you choose
- A Magcoa portable Yard Ramp is a loading dock on wheels

For full details use the coupon below.

MAGNESIUM COMPANY OF AMERICA Materials Handling Div.
magcoa
East Chicago 5, Indiana
Representatives in principal cities

☐ Please send special Yard Ramp Facts File

Name and Title__________
Company__________
Address__________
City-Zone-State__________

Attracted by lower prices, housewives will step up their food purchases in the coming months, and the dollar volume for all 1958 will set a new record. Shoppers will be more interested in higher-priced foods, and price increases toward the end of the year will have little effect on buying.

Auto sales bog down

After perking up a bit in late Spring, sales of new passenger cars lagged in the Summer months. The introduction of 1959 models will lift sales somewhat for the rest of the year, but over-all volume for 1958 will be about 25 per cent to 30 per cent below last year. Industry officials look forward to a sharp gain in 1959 sales.

As more producers complete the earlier-than-usual model changeover process, the output of cars and trucks will advance in September and October. How great the increase will be depends, of course, on how well customers accept the new models; and any labor difficulties or strikes in the Fall would curtail output. In an attempt to cater to the possibly changing taste of some Americans, auto makers are contemplating buying interests in small foreign models, and one of the Big Three, Chrysler, has already done so.

To accommodate their needs for the model changeovers, auto producers stepped up their buying of steel in late July and early August, but orders slackened later. These will move up moderately in September, but there will be no significant changes until dealers' sales expand appreciably.

New orders for steel from the construction, petroleum, and farm implement industries were better than expected in August, and will climb further in the coming months. An increase in bookings from appliance makers got under way in mid-August and will continue to improve in the Fall months, despite the recent price hikes on finished steel by many producers.

Steel ingot production moved up almost steadily through July and August, and the gradual improvement will be maintained in the coming months. Output for the year will range from 20 per cent to 25 per cent below 1957.

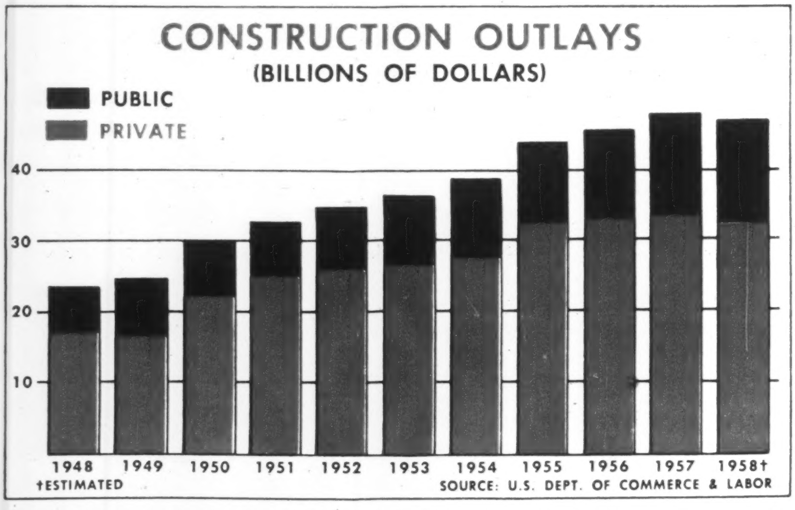
Warm weather, which stimulated the use of air-cooling equipment, boosted electric power output to a record high level in early August, and fractional year-to-year gains prevailed throughout most of the remainder of the month. Production will exceed that of a year ago this Fall as industries step up their operations.

Manufacturers' orders perking up

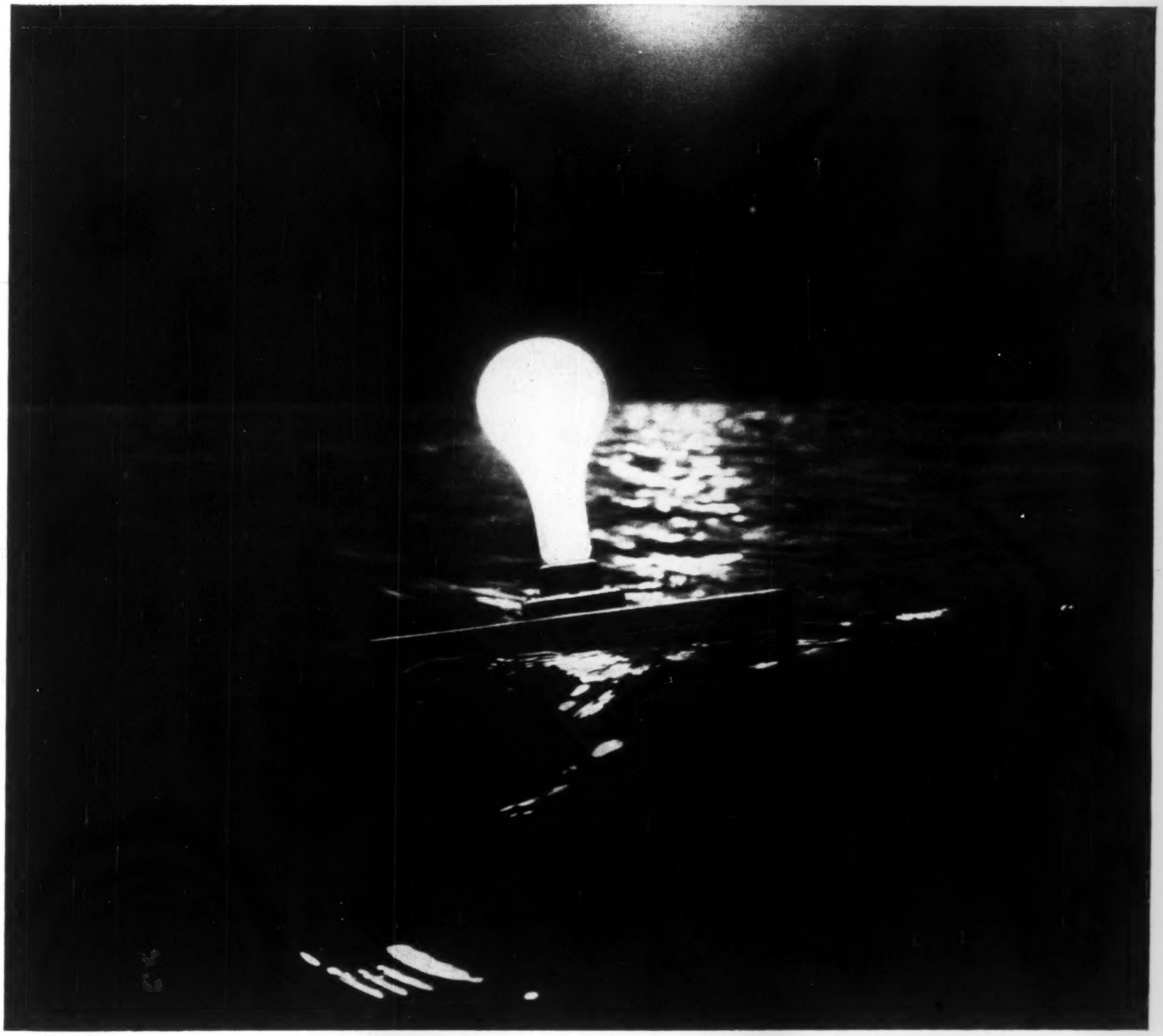
Manufacturers this Summer reported the highest levels of new orders since last November. As consumers increase their buying of hard goods, orders for durable goods at the manufacturing level will move steadily upward through the Fall months. The Summer gains were attributed primarily to higher orders for fabricated metals and aircraft products. Bookings in nondurables will hold steady or rise a bit.

The recent rise in machine tool orders reflects increased business confidence. This is an indication that manufacturers are planning to step up production. Although machine tool orders will move up gradually through the fourth quarter, volume for the year will be sharply below 1957.

Manufacturers continued to reduce their inventories during the Summer. While the ratio of durable goods inventories to sales fell appreciably from the Spring figure, it remained moderately



CONSTRUCTION ON UPGRADE: *Although construction outlays will expand appreciably in the fourth quarter, the dollar value of all 1958 will be down fractionally from 1957.*



If you export electrical equipment...

use Chase Manhattan's world-wide network of 51,000 bankers-at-the-spot

When you take your international trade problems to the people at The Chase Manhattan Bank, the services of a world-wide network of 51,000 correspondent banks and branches are immediately at your disposal.

Whatever, or wherever your problem, you get the overseas help you need from the banker-at-the-spot . . . the man who has an intimate knowledge of local trade conditions and knows how to make them work for you.

This is possible because Chase Manhattan has a close personal relationship with its foreign correspondents. Chase Manhattan and its stateside correspondents handle the U. S. problems of the Bank's overseas correspondents. They, in turn, get things done for Chase Manhattan in their own countries. Such reciprocity enables you to get more efficient banking service in the markets of the world.

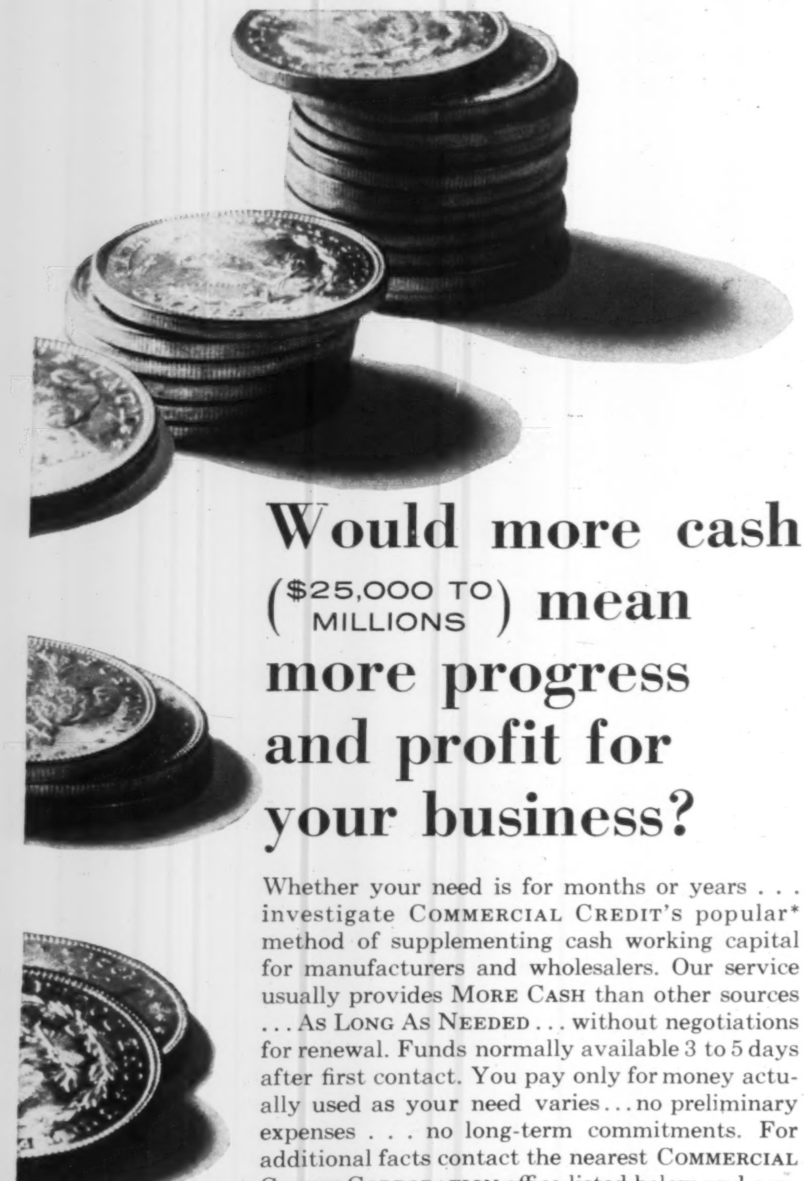
Here at home, experienced men in the International Department sit down and talk things out with you personally. They work with you on a basis of individual analysis and imaginative planning. And knowing the right men in the right places, they can quickly contact the banker-at-the-spot who can best help you.

If you have import or export problems, phone HAnover 2-6000 or write to International Department, The Chase Manhattan Bank, 18 Pine Street, New York 15.

THE CHASE MANHATTAN BANK

Chartered in 1799

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION



Would more cash ($25,000 TO MILLIONS) mean more progress and profit for your business?

Whether your need is for months or years . . . investigate COMMERCIAL CREDIT's popular* method of supplementing cash working capital for manufacturers and wholesalers. Our service usually provides MORE CASH than other sources . . . AS LONG AS NEEDED . . . without negotiations for renewal. Funds normally available 3 to 5 days after first contact. You pay only for money actually used as your need varies . . . no preliminary expenses . . . no long-term commitments. For additional facts contact the nearest COMMERCIAL CREDIT CORPORATION office listed below and say, "Send me more information about the service offered in Dun's Review."

Consult Commercial Credit

300 St. Paul Place, Baltimore 2
222 W. Adams Street, Chicago 6
722 S. Spring Street, Los Angeles 14
50 W. 44th Street, New York 36
112 Pine Street, San Francisco 6

*COMMERCIAL CREDIT COMPANY subsidiaries, during each of the last several years, advanced over one billion dollars to manufacturers and wholesalers to supplement cash working capital. During these years, total volume of finance subsidiaries amounted to over three billion dollars. CAPITAL AND SURPLUS OVER $200,000,000.

higher than a year ago. The ratio in nondurables was slightly below that of the Summer months of 1957.

Nondurables manufacturers have begun replacement buying and will soon begin increasing their inventories. Producers of durables will begin purchasing for replacement in the next month or so, but will be more cautious in actually building up their inventories.

Although retailers reported that their stocks were down only slightly from a year ago, the retail inventory-sales ratio this Summer was at the lowest level, except for one month, since 1955. This means that stores will shortly attempt to replenish depleted stocks and prepare for the Christmas buying season. This, of course, will spark activity at the wholesale level this Fall, especially in apparel, textiles, furniture, and major appliances.

Good outlook in construction

Recent reports of increased orders for construction machinery and building materials support the belief that construction activity will continue to rise in the Fall. Increases in contracts for both private and public building will boost total outlays modestly.

The most appreciable increases will prevail in highway construction, commercial building, and housing. Industrial building will show little, if any, rise before the end of the year.

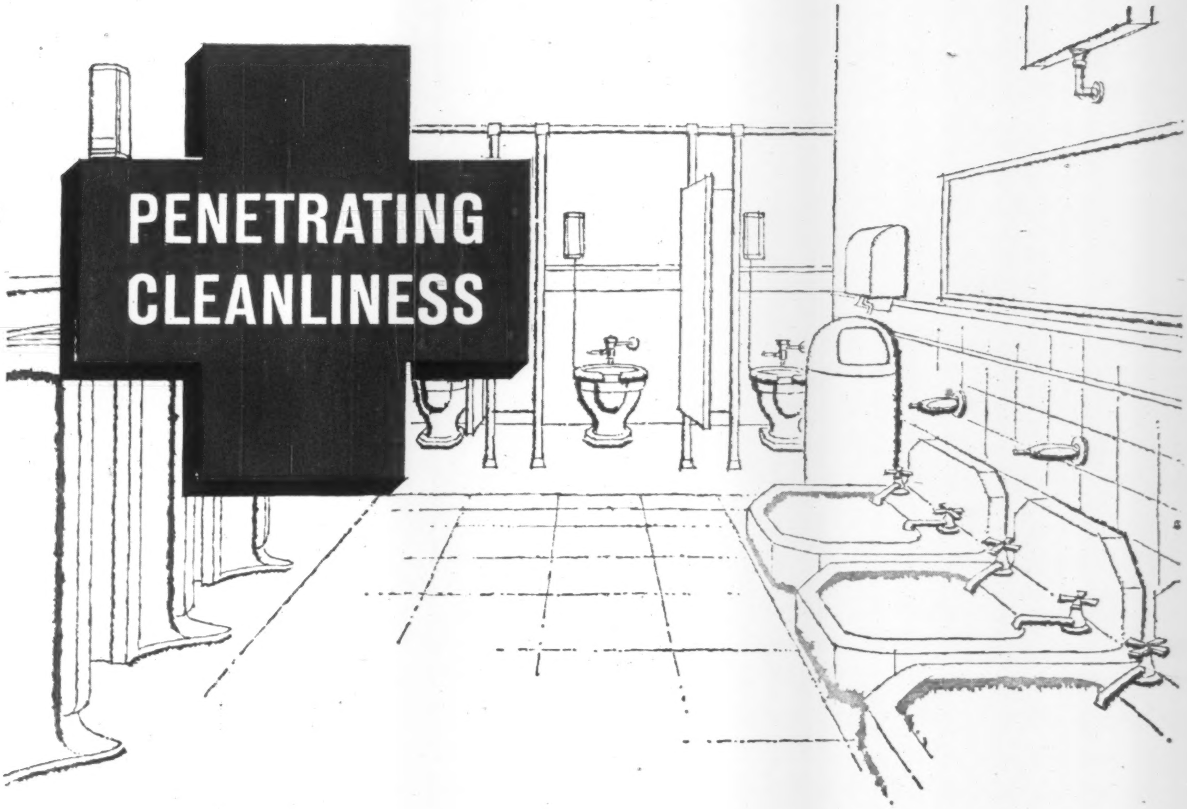
In early Summer, applications for Federal Housing Administration insurance and requests for Veterans Administration appraisals were up noticeably. This will lead to an appreciable rise in housing starts in the fourth quarter and early 1959. And between now and the end of the year the Government is likely to take further action to stimulate home building. Still, total housing starts in 1958 will be slightly below the 1957 level.

Prices received by farmers edged downward in the Summer months but

Weekly Business Signposts

	Latest week	Previous week	Year ago
Steel ingot production Ten thousand tons (a)	168	163	210
Electric power output Ten million KW hours (b)	129	127	124
Bituminous coal mined Hundred thousand tons (c)	81	79	96
Automobile production Thousand cars and trucks (d)	74	81	138
Department store sales Index 1947–1949=100 (e)	119	114	118
Bank clearings, 26 cities Hundred million dollars (f)	22.7	21.2	21.8
Business failures Number of failures (f)	262	290	222

SOURCES: (a) Amer. Iron & Steel Inst.; (b) Edison Electric Inst.; (c) U.S. Bureau of Mines; (d) *Automotive News*; (e) U.S. Bureau of Labor Statistics; (f) DUN & BRADSTREET, INC. Steel data for the third week of August; sales for the first week; all others for the second week.



PENETRATING CLEANLINESS

helps custodians where they need help most

Industrial washrooms need a program of penetrating cleanliness that kills bacteria, suppresses odors, removes drain build-ups, even discourages waste while encouraging good hygiene.

What's involved?

The three sensible steps of the West Protective Sanitation Program. An inexpensive way to help custodians where they need help most.

What does it include?

First, a scientific, heavy-duty cleaning of washroom facilities at regular intervals as traffic requires. This insures sanitary conditions. Cleans thoroughly. Destroys germs that cause T.B., Polio, Typhoid, Influenza and other diseases. Prevents drain clogging. And provides for continuous freshening of air.

Second, training for custodians so that they know how to maintain high standards of sanitation between heavy-duty cleanings.

Third, an analysis of washroom equipment that often leads to easier maintenance as well as savings in towels, soap and other supplies.

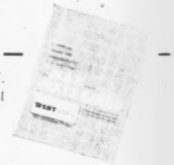
The West Protective Sanitation Program frequently prevents enough waste to pay for itself. Why not talk it over with a West Sanitation Specialist. Just write. Or call your local West office.

Programs and Specialties for
Protective Sanitation and Preventive Maintenance

WEST CHEMICAL PRODUCTS INC.

WEST DISINFECTING DIVISION

WEST CHEMICAL PRODUCTS INC., 42-16 West Street, Long Island City 1, N. Y.
Branches in principal cities • In Canada: 5621-23 Casgrain Ave., Montreal



☐ Please send information on the West Protective Sanitation Program.
☐ Please have a West Representative telephone for an appointment.

Name____________________________

Position____________________________

Mail this coupon with your letterhead to Dept.

smart looking

... with built-in flexibility

WONDER BUILDING® STRUCTURES ADAPT TO ANY NEED!

Use wood, brick, block or any building material, but top it off with extra strength, double corrugated Wonder Building Truss-Skin roof panels. No loss in floor area since each arch is rigid — self-supporting. Easier to put up and in less time. Panels bolt together with savings in construction time and labor. Low in initial cost and wide in flexibility, patented Wonder Building structures adapt to any construction need. Write Dept. S-958 today for amazing particulars.

DOUBLE CORRUGATION

Panels of patented Coro-Crimp design. Wide range of widths and lengths.

Wonder Building panels provide complete, attractive, low-cost structures without pillars, posts, braces or trusses. 100% useable space for material handling, storage or business use. Hundreds of designs.

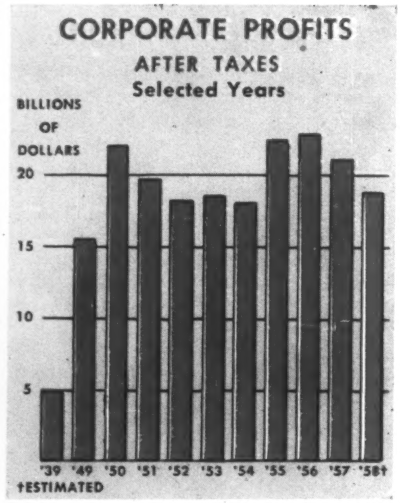
"ENGINEERED TO THE MARKETS"
TRADEMARK

TRUSSLESS
PATENTED
Wonder Building ®

Wonder Building Corporation of America
30 N. LaSalle St. • Chicago 2, Illinois

SYMBOL OF SIMPLICITY

Arch panels are quickly bolted together. Weather sealed with neoprene washers.



LOWER PROFITS: *Despite recent gains in corporation profits, the level for 1958 as a whole will be noticeably less than in 1957.*

remained noticeably higher than a year earlier. The recent decline was the result of large harvests and the movement of supplies of apples, peaches, and other fruit to the markets. This offset seasonal price increases on milk and eggs. Prices paid by farmers were steady.

The prices that farmers receive will move down more in the Fall months as harvesting picks up. The U.S. Department of Agriculture has predicted that crop production this year will be the highest in the nation's history.

Increasing stock activity

In early August the Federal Reserve Board lifted margin requirements to curb the excessive use of credit in the stock market. Although trading was subdued for a short time, stock averages then rebounded to reach the highest levels thus far in 1958. Many business men interpret this as a sign that business confidence is on the rise.

Many Government economists are concerned with the steady rise in interest rates since mid-June, which is likely to continue for the rest of the year and well into 1959. It is feared that the higher cost of borrowing will discourage borrowers and slow up the recovery.

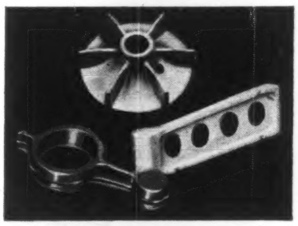
Despite lower interest rates and decreased commercial loan demand at the beginning of this year, bank earnings in 1958 will be close to those of the preceding year. Declines will be offset by the steady increase in total deposits and other earning assets.

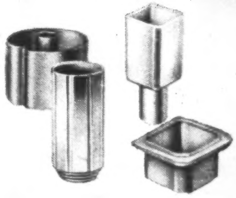
This report was prepared in the Business Economics Department, DUN & BRADSTREET, INC., by John W. Riday.

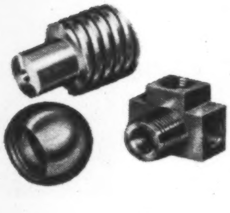
1 ONE DEPENDABLE SOURCE for all your fabricated metal parts

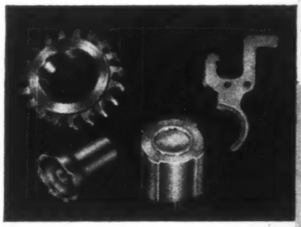
only MUELLER BRASS CO. offers *all these metal fabricating methods* to assure you the best product at the best possible price

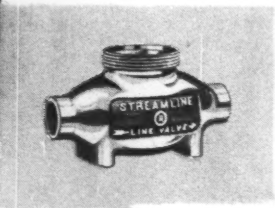
To obtain the desired physical and design requirements in a part at the lowest unit cost, there is usually one specific process by which that part can be most successfully and economically manufactured. Because the Mueller Brass Co. offers all these methods of production, you get sound engineering, the best method of fabrication and the assurance of getting the best product at the lowest cost. Sales and engineering service is available to you at Mueller Brass Co. offices throughout the United States. Make Mueller Brass Co. your one dependable source for all your fabricated part needs.

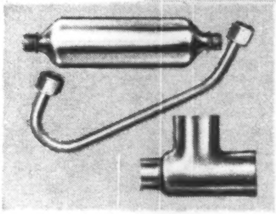












forgings

The Mueller Brass Co. is the world's largest producer of brass, bronze and aluminum forgings.

impact extrusions

The Mueller Brass Co. now offers "Cold-Prest" non-ferrous and ferrous impact extrusions. Flexible new facilities makes practical either long or short production runs of simple or complex shaped parts on an economical basis.

screw machine products

The Mueller Brass Co. maintains one of the largest automatic screw machine departments in the country, specializing in the manufacture of non-ferrous parts . . . completely equipped to perform secondary operations.

powder metal parts

Precision ferrous and non-ferrous powder metal parts are available from Mueller Brass Co. through its subsidiary, The American Sinteel Corporation.

castings

The Mueller Brass Co. has a modern foundry equipped to produce quality brass and bronze castings to your specifications.

formed copper tube

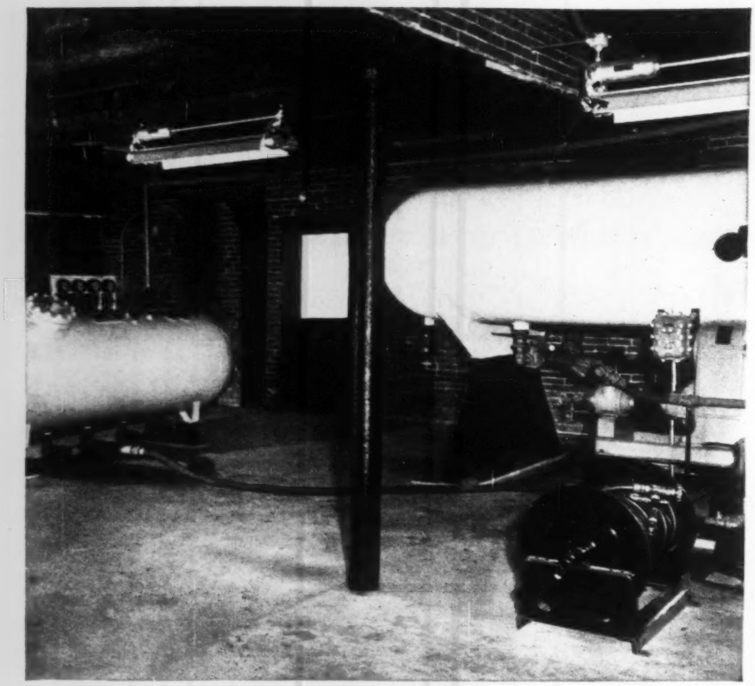
The Mueller Brass Co. offers complete facilities for producing formed copper tube shapes and assemblies to the most demanding tolerances.

also producers of:

Super Cutting Red Tip Brass Rod • Aluminum Extrusions • Aluminum Sheet, Coil and Strip • Plastic Pipe and Fittings • Copper Tube and Solder Type Fittings.

260

MUELLER BRASS CO. PORT HURON 38, MICHIGAN

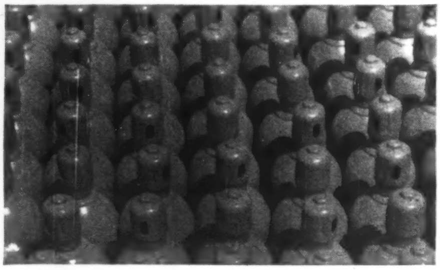


▲ **Our own LP-Gas laboratory.** Duplicating actual field conditions, this scientific laboratory enables our product engineers to provide the LP-Gas industry with more efficient and more profitable equipment for moving LP-Gas, a pressurized liquid, from bulk storage to delivery truck to customer tanks.

▲ **Automatically welding a 2" head** to a $2\frac{5}{16}''$ carbon steel shell is indicative of the heavy plate fabrication facilities available at our Downingtown Division. Engineers and shopmen are experienced in working in carbon steel, stainless steel, clad metals and alloys.

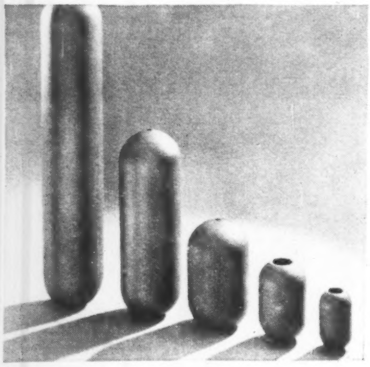
Lifesaving oxygen bank. This bank of Hackney compressed gas cylinders holds lifesaving oxygen under high pressure... keeps it safely available in hospitals. Industry, too, relies on these same sturdy oxygen cylinders for welding, flame-cutting and other uses.

▼



How industrial progress takes shape

LP-Gas men respect our meter prover. This strange-looking object is an LP-Gas liquid meter prover. It was built by government direction for the National Bureau of Standards. Its job is to test LP-Gas meters—to make sure that LP-Gas measuring meters are accurate and in good working order.



Strong, lightweight seamless shells. These Hackney-made hydraulic accumulator shells, like many Hackney shapes, are deep drawn from a single plate of metal. *Advantages:* smooth surface; lightweight, seamless, strong; resist hydraulic pressure and pulsations; reduce production and assembly costs.

Stainless steel chemical containers. These lightweight Hackney chemical containers are safe, easy to handle, pour readily with minimum spillage, and nest-and-tier for space-saving storage and eliminate breakage losses. Wherever they are used, handling, shipping, and storage costs are cut sharply.

Pressed Steel Tank Company, 1465 S. 66th St., Milwaukee 14, Wis.

Pressed Steel

Hackney MILWAUKEE

Manufacturer of Hackney Containers
for Gases, Liquids and Solids

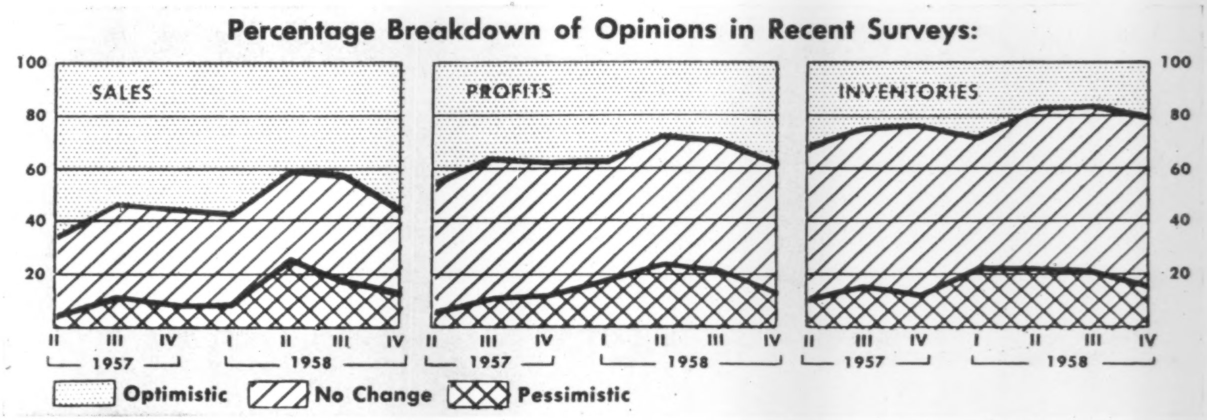
Downingtown

DOWNINGTOWN IRON WORKS INC.

Heat Transfer Equipment
Steel and Alloy Plate Fabrication

Business Men's Expectations . . . **Fourth Quarter 1958**

Prospects for Sales Look Bright



PROSPECTS FOR *fourth-quarter sales, profits, and inventories are brighter than in the two previous quarters, according to the latest poll. The top portion of the field represents percentages expecting increases; the center, no change; the bottom, decreases.*

ENCOURAGED BY recent reports of heightened business activity, 55 per cent of the executives interviewed in DUN & BRADSTREET'S latest compilation of business men's opinions anticipated year-to-year sales increases in their own companies during the fourth quarter of 1958. In the preceding survey, 41 per cent had expected higher third-quarter sales than in 1957.

Of all those interviewed, manufacturers of durable goods were most optimistic regarding their fourth-quarter sales prospects, while retailers were least sanguine. Sixty per cent of the durable goods makers looked forward to increases, and 26 per cent expected volume to match year-ago levels. In the preceding survey, only 37 per cent had anticipated gains.

The executives queried were more apprehensive about their fourth-quarter profits than about sales. Lower profit levels were anticipated by 15 per cent of all respondents, and 47 per cent expected no year-to-year change. Again, durable goods manufacturers most often foresaw higher profits.

In the two preceding surveys, more business men intended to cut than to build up inventories. In contrast, the "ups" somewhat outnumbered the "downs" in the present poll. This was especially true among manufacturers of both durables and nondurables.

Although a large majority of the executives (78 per cent) expected no change in their fourth-quarter selling prices, more than three times as many contemplated an increase in prices as planned to cut prices. The proportion was especially high among wholesalers.

It was the consensus of 82 per cent of the executives that they would need as many workers on their payrolls as in the fourth quarter of 1957. Staff increases were most often expected by manufacturers of durables.

A little over half of all the manufacturers interviewed foresaw a pick-up in new orders, and 40 per cent expected no year-to-year change.

In interpreting the results of this survey, it should be remembered that the answers are not a forecast but an indication of the views of a representative group of business men late in July, when the survey was made.

Prepared by John W. Riday,
Business Economics Department.

THE FOURTH QUARTER OUTLOOK

A COMPARISON OF 1958 WITH 1957

Percentage breakdown of opinions expressed

	ALL CONCERNS			MANUFACTURERS			WHOLESALERS			RETAILERS		
	Increase	Unchanged	Decrease	Increase	Unchanged	Decrease	Increase	Unchanged	Decrease	Increase	Unchanged	Decrease
SALES	55	33	12	59	30	11	52	37	11	47	35	18
PROFITS . . .	38	47	15	43	43	14	35	51	14	30	52	18
PRICES	17	78	5	14	81	5	22	74	4	11	82	7
INVENTORIES	20	64	16	22	62	16	18	69	13	16	61	23
EMPLOYMENT	10	82	8	15	76	9	5	90	5	6	86	8
NEW ORDERS	..	..	..	52	40	8	..	..	..	..	..	..

Now
STATIC POWER
Adjustable Speed Packaged Drives

No moving parts . . .

Cutler-Hammer *ULTRAFLEX®* *DRIVES* provide outstanding savings in installation—operation—maintenance

No moving parts! Light, compact static power conversion units have replaced the conventional m-g set. Ultraflex Packaged Drives save up to 50% in valuable floor area . . . up to 75% in weight, permitting rapid, low cost installation or rearrangement of production machinery without special handling equipment or floor loading preparations.

No moving parts! Ultraflex Packaged Drives provide a new high standard of operational efficiency and ultra-responsive speed control. Works perfectly without forced ventilation . . . less power wasted as unwanted heat. No power robbing friction or windage losses.

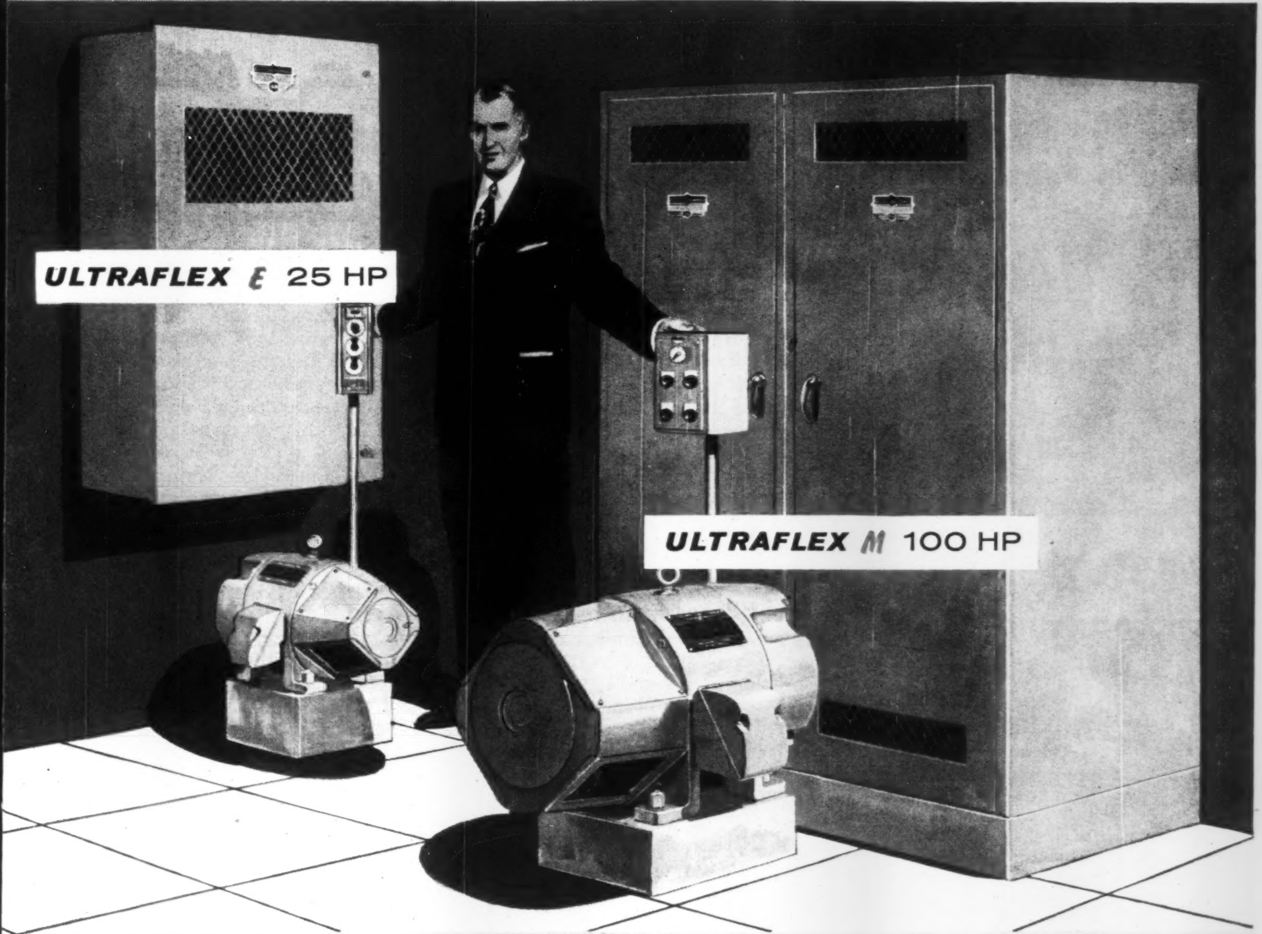
No moving parts! Simple static power conversion units require only a fraction of the time and effort needed to maintain conventional rotating type drives. With Ultraflex, there are no bearings, commutators, or brushes to service. No shafts to align. No couplings to maintain. No inertia loads to balance. No fans or filter to clean or change.

Ultraflex Packaged Drives come complete with operator's station, static power conversion unit, and heavy duty D-c drive motor. Standard Ultraflex Drives provide an 8:1 speed range with wider ranges available upon request. Optional features include dynamic braking, jogging, reversing, tach-generator speed regulation, etc.

Cutler-Hammer also provides a complete engineering service which will custom-design a static powered adjustable speed drive to meet your specific requirements. Get all the facts today, write on your company letterhead for new bulletins EN64-S270 and EN65-S270. Cutler-Hammer Inc., Milwaukee 1, Wisconsin.

CUTLER-HAMMER
CONTROL
C-H

Cutler-Hammer Inc., Milwaukee, Wis. *Division:* **Airborne Instruments Laboratory.** *Foreign:* **Cutler-Hammer International, C. A.**
Associates: Canadian Cutler-Hammer, Ltd.; Cutler-Hammer Mexicana, S. A.; Intercontinental Electronics Corporation, Inc.



ULTRAFLEX DRIVES Pack More Power per Square Foot . . . More Power per Pound

	CONVENTIONAL m-g DRIVES		ULTRAFLEX—E	
HP	SQ. FT.	LBS.	SQ. FT.	LBS.
5	3.89	543	Wall Mounted	215
7½	3.89	550	Wall Mounted	215
10	5.44	647	Wall Mounted	215
15	7.0	963	Wall Mounted	330
20	9.5	1830	Wall Mounted	330
25	9.5	1990	Wall Mounted	330
30	9.5	2120	6.46	625
40	13.8	2350	6.46	625

	CONVENTIONAL m-g DRIVES		ULTRAFLEX—M	
HP	SQ. FT.	LBS.	SQ. FT.	LBS.
5	3.89	543	3.5	660
7½	3.89	550	3.5	870
10	5.44	647	3.5	870
15	7.0	983	3.5	1000
20	9.5	1830	3.5	1000
25	9.5	1990	4.5	1250
30	9.5	2120	4.5	1250
40	13.8	2350	4.5	1250
50	17.8	2980	11.7	2200
60	23.3	4070	11.7	2200
75	23.3	4800	11.7	2200
100	25.2	5700	11.7	2400

ULTRAFLEX E 1 HP to 40 HP

Electronic Type Adjustable Speed Drives

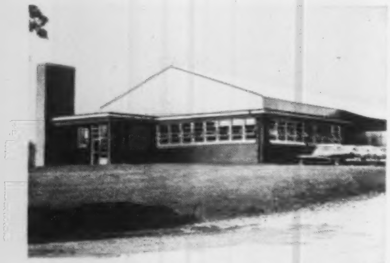
Ultraflex E is the simplest, most flexible, most dependable electronic adjustable speed drive on the market today. Heavy duty power tubes have replaced all "radio type" components assuring maximum efficiency and maintenance-free operation. Standard features of design include a closed loop voltage feed back system for accurate voltage regulation, current limit control, and static rectifier field excitation. Compact design permits wall mounting of the control units up to 25 HP.

ULTRAFLEX M 1 HP to 200 HP

Magnetic Amplifier Type Adjustable Speed Drives

Ultraflex M Packaged Drives set new standards for ultra-efficient, ultra-responsive operation. Fully 15% more efficient than conventional rotating type drives, the static magnetic amplifier power conversion unit avoids all power losses due to friction, windage and the necessity of transferring power across multiple air gaps as in rotating machinery. Standard Ultraflex M drives are equipped with a closed loop voltage feed back system with IR compensation for accurate voltage regulation, current limit control, and static field excitation.

Just pick up
your phone—and
build well—any
place in America



Any architectural styling for prestige or traffic appeal is practical and economical with Butler Buildings.

with **Butler**
buildings and
the network of
Butler Builders

If you have a nationwide construction program—you can save thousands of hours of executive and engineering time and cost. Standardize on Butler metal buildings—and the only truly national network of independent builders—the Butler Builder organization.

Butler buildings are a line of fully pre-designed, pre-engineered, precision made, factory-fabricated metal buildings. They have proved so superior—so versatile—so economic—that they are the world's most popular metal buildings. You'll find them used for factories, warehouses, dealerships, supermarkets; the list is endless.

You can specify Butler buildings in your home office and have them built anywhere in the United States or Canada — by competent builders who are fully experienced with local codes and conditions. Phone your nearby Butler Builder and get all the facts. He's listed in the Yellow Pages under "Buildings" or "Steel Buildings." Or write direct.

BUTLER
STEEL PRODUCTS

BUTLER MANUFACTURING COMPANY
7417 East 13th Street, Kansas City 26, Missouri

Manufacturers of Buildings • Oil Equipment
Farm Equipment • Dry Cleaners Equipment
Outdoor Advertising Equipment
Custom Fabrication

Sales offices in Los Angeles and Richmond, Calif.
Houston, Tex. • Birmingham, Ala. • Atlanta, Ga.
Minneapolis, Minn. • Chicago, Ill. • Detroit, Mich.
Cleveland, Ohio • New York City & Syracuse, N. Y.
Washington, D.C. • Burlington, Ontario, Canada

Failures . . Latest trends in business casualties

Casualty Downtrend Continues

CONTINUING DOWN for the fourth month, business failures in July numbered 1,253, the smallest total since February. However, the month-to-month dip was milder than usual for the time of year, and casualties remained 18 per cent above last year's level. While the count of failing concerns stood at a 25-year high for the month of July, the failure rate in terms of the growing business population was well below the prewar 1939–1940 level and the depression peaks of 1932 and 1933.

Casualties occurred this July at a rate of 58 per 10,000 listed enterprises, edging up from 57 in June and exceeding the 48 per 10,000 a year ago. The comparable rate was 71 failures per 10,000 in 1939 and 94 in July 1933.

Liability totals climb

Despite the decline in casualties, dollar liabilities again moved upward, rising 6 per cent to $65 million. Boosted principally by nine failures above the million mark, they bulked almost half again as heavy as in the previous July. Changes from 1957 were relatively slight among casualties under $25,000, but concerns succumbing above that size level were some 30 per cent more numerous than a year ago.

Retail and wholesale failures accounted entirely for the June-to-July dip. Tolls in these two groups were the lowest so far this year. Fewer concerns succumbed in nearly all wholesale lines, but the retailing decline centered in furniture and appliance stores, eating and drinking places, and the automotive trades. Higher failures, on the other hand, occurred among retailers of food, apparel, and building materials.

In both manufacturing and construction, casualties exceeded June levels. A marked upturn took place among general builders, although subcontractors and heavy construction contractors had the lowest mortality since January. The rise in the manufacturing toll during July occurred mostly in lumber operations—logging, sawmills, and planning mills.

Compared with July a year ago, failures ran some 40 per cent higher among manufacturers and wholesalers. Totals climbed in all manufacturing industries except stone, clay, and glass. Twice as many printing, publishing, and steel concerns succumbed as in the previous July, and increases were considerable in the mining, food, and machinery industries. In wholesaling, the uptrend from 1957 was concentrated in a few lines—building materials, food, machinery, and metals. Hotels and cleaning businesses accounted for appreciably heavier tolls in services. The least change from last year, on the other hand, was evident in retailing, where there were noticeable increases in only three lines—automotive, drugs, and food.

Regional pattern varies

Geographically, trends between June and July were decidedly mixed; de-

WHY BUSINESSES FAIL — Year Ended June 30, 1958

APPARENT CAUSES	MFG. %	WHOL. %	RET. %	CONST. %	COMM. SERV. %	TOTAL %
NEGLECT	2	4	3	3	3	3
FRAUD	2	3	2	2	2	2
INEXPERIENCE	94	91	92	92	92	93
Inadequate sales	57	51	53	39	56	52
Heavy operating expenses	8	4	4	11	8	6
Receivables difficulties	14	21	6	18	7	11
Inventory difficulties	6	11	11	2	2	8
Excessive fixed assets	10	4	7	6	15	8
Poor location	*	1	4	*	2	3
Competitive weakness	15	19	21	28	17	21
Other	5	5	4	8	3	5
DISASTER	1	1	2	1	1	1
REASON UNKNOWN	1	1	1	2	2	1

*Less than 1 per cent.

Compiled by DUN & BRADSTREET, INC. Classification based on opinions of creditors and information in credit reports. Since some failures are attributed to a combination of causes, percentages do not add to 100 per cent.

WHY YOUR ADVERTISING BELONGS IN

DUN'S REVIEW

and Modern Industry

YOU HAVE THE RIGHT SETTING

DUN'S REVIEW and Modern Industry's editorial program is specifically devoted to business management. The magazine's authoritative articles keep readers up to date on developments and trends in production; product research; sales and distribution; employer relations; business legislation; finance; executive methods; and business conditions. The stature of the publication makes it possible to obtain information from leading authorities in industry and government. Articles are skillfully edited to insure maximum interest and usefulness. Striking covers and inviting layout also contribute to thorough readership by the important and busy people this publication serves.

As a result the magazine's editorial policy creates an especially favorable environment for your advertising. What better time to influence business executives about business products than when they are reading about business?

YOU REACH THE RIGHT PEOPLE

DUN'S REVIEW and Modern Industry reaches readers who are executives. 73% of the men have titles of General Manager or higher; more than 53,000 are Presidents. Readers include 115,000 paid subscribers and approximately 185,000 others who are pass-along readers. This forms a total audience of about 300,000 men in management. Their companies form the solid core of American business.

These men influence the major buying and investing of their companies. They also are influential buyers in their own right and through the community institutions they serve.

YOU REACH THE RIGHT PLACES

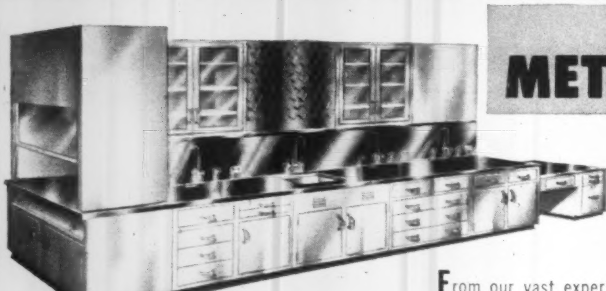
DUN'S REVIEW and Modern Industry reaches 72,000 executives in Industry (managing manufacturing and processing plants). It is read by 29,000 executives in Distribution. Over half of the readers are top decision makers in companies with annual sales of $1,000,000 or more.

YOU GET THE RIGHT RESULTS

DUN'S REVIEW and Modern Industry's rates are such that every advertiser can afford an advertising program that achieves impact through dominance and continuity. Companies interested in direct response report quality sales leads from their advertising in the magazine.

For full information write to the Advertising Department,
Dun's Review and Modern Industry, 99 Church St., New York 8.

IMPROVE YOUR LABORATORY *with* MODERN, FUNCTIONAL, EQUIPMENT



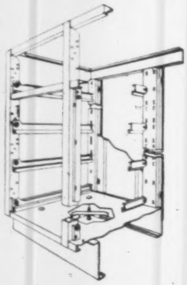
by
METALAB
for
INDUSTRIAL
EDUCATIONAL
INSTITUTIONAL
HOSPITAL use . . .

From our vast experience in laying out the nation's finest laboratories, METALAB can show you how to obtain maximum working and storage area in a minimum of space . . . how to make current equipment adaptable to any possible future needs . . . and how to achieve true economy in laboratory equipment. This know-how, plus the use of only the finest laboratory-tested materials, assures you of obtaining the most at Metalab for your laboratory budget.

Our Engineering Dept. will be pleased to solve your laboratory planning problems without any cost or obligation on your part. Write today for our literature!

Cutaway view of our standard base unit: This construction technique permits you to interchange drawers and cupboards by utilizing the same base cabinets as your laboratory requirements change.

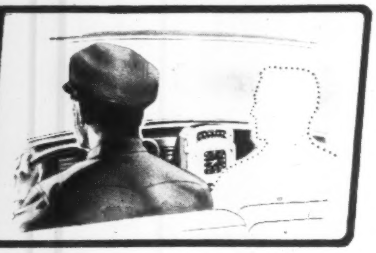
METALAB mass-production methods, which have been adapted to custom laboratory equipment and furniture results in "custom" quality units at "standard" prices.



SECTIONAL LABORATORY FURNITURE and EQUIPMENT by
METALAB *Equipment Company*
234 Duffy Ave., Hicksville, Long Island, N. Y.

Our new 180 page Catalog is available upon request on your company letterhead

Would you like to have your fleet supervisor ride on every trip of each truck . . . *without leaving his desk?*



WAGNER-SANGAMO **TACHOGRAPH** "supervises"
every movement of truck from start to return

When you equip your trucks with TACHOGRAPHS it's like having your fleet supervisor ride on every trip . . . without leaving his desk. Tachograph is mounted on dashboard. Chart, placed inside the instrument before each run, makes a graphic record of time of operation, duration of stops, speeds and distances traveled.

These graphic reports of every run . . . help cut unscheduled stops, help you plan better routing, control vehicle speed, and lower operating costs by encouraging savings in time, gas, oil and tires. Get details. Mail coupon for Bulletin SU-3.

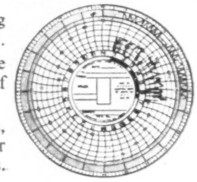
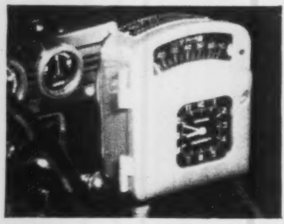


CHART TELLS ALL



Wagner Electric Corporation
6439 PLYMOUTH AVE. • ST. LOUIS 14, MO.
Please send a copy of Bulletin SU-3
Name________________
Company________________
Address________________
City__________State__________
We operate__________Vehicles WS58-7

clines in five regions outweighed slightly the increases in four others. For the New England, South Atlantic, West South Central, and Mountain States, failures dipped to the lowest level this year.

Regional shifts from 1957 levels were as varied as their month-to-month trends. Casualties climbed 50 per cent in the East North Central States and 40 per cent in the Middle Atlantic, as well as rising moderately in the New England and South Atlantic States. In contrast, fewer businesses failed than last year in the South Central, Mountain, and Pacific States. Mortality meanwhile held even in the West North Central States; tolls fell short of 1957 in the agricultural states of the area, balancing a marked rise in Missouri.

Management weaknesses

The major reasons underlying failures—lack of experience and "know-how"—are independent of the economic climate, but they are more severely tested in bad business weather. The current analysis of causes indicates a mounting portion of casualties attributable to receivables problems, particularly among manufacturers and wholesalers. The strain of competition has taken a growing toll in all functions, but it appears to be especially severe for retailers and contractors. Among the latter, underbidding and inability to estimate

FAILURES BY DIVISION OF INDUSTRY

	Cumulative Total (January–July)		Total liabilities in million $ (January–July)	
	1958	1957	1958	1957
MINING, MANUFACTURING..	1697	1390	161.6	125.4
Mining—coal, oil, misc...	58	36	10.3	6.6
Food and kindred products	121	106	10.4	7.4
Textile products, apparel.	339	309	24.1	18.9
Lumber, lumber products.	309	274	20.2	16.0
Paper, printing, publishing	114	76	6.2	5.4
Chemicals, allied products	41	33	2.4	2.6
Leather, leather products.	71	41	9.2	5.0
Stone, clay, glass products	37	37	7.6	1.7
Iron, steel and products..	111	65	10.8	22.9
Machinery.............	171	145	17.0	15.1
Transportation equipment	45	36	13.5	3.8
Miscellaneous...........	280	232	29.9	20.1
WHOLESALE TRADE.........	877	734	44.3	48.0
Food and farm products..	201	176	9.6	12.5
Apparel...............	43	29	2.0	2.2
Drygoods..............	28	18	0.9	0.7
Lumber, bldg. mats., hdwre.	108	87 ®	7.1	5.4 ®
Chemicals and drugs.....	28	28 ®	0.6	1.2 ®
Motor vehicles, equipment	43	40 ®	1.2	2.4 ®
Miscellaneous...........	426	356	22.9	23.6
RETAIL TRADE............	4737	4155	149.8	112.6
Food and liquor........	684	684	15.6	13.8
General merchandise.....	182	175	7.2	7.5
Apparel and accessories..	771	703	21.7	13.5
Furniture, furnishings....	705	611	30.1	23.5
Lumber, bldg. mats., hdwre.	310	291	10.4	8.7
Automotive group.......	678	483	27.4	11.9
Eating, drinking places...	859	758	23.8	17.8
Drug stores............	102	91	2.7	2.4
Miscellaneous...........	446	359	10.9	13.5
CONSTRUCTION............	1313	1232	72.3	67.1
General bldg. contractors.	538	472	38.8	36.8
Building subcontractors..	703	683	24.6	23.5
Other contractors.......	72	77	8.8	6.9
COMMERCIAL SERVICE......	700	637	40.3	27.6
TOTAL UNITED STATES......	9324	8148	468.3	380.7

Liabilities are rounded up to the nearest million; they do not necessarily add up to totals.

® Revised.

costs accurately continued to be major problems.

Interestingly, inventory problems and excessive fixed assets declined as a cause of failure. Poor location, a factor mostly affecting retailers, has produced a small but steady percentage of casualties over recent years.

Neglect of a business through bad habits, poor health, or marital difficulties is indicated as the underlying reason for 3 per cent of the concerns failing in the twelve months ended June 30. Naturally, this factor plays a more important role among small individual proprietorships than among large corporations.

Business age and survival

Experience of course, cannot be measured solely in years. It must be appraised in terms of the business conditions prevailing during the lifespan of an enterprise. Currently, concerns more than ten years old have edged up to 22 per cent of total failures, as against 9 per cent in 1947. Although they survived in the comfortable climate of the postwar years, heightening competition and the narrowing of cost-price margins have now, apparently, been exacting their toll.

Despite the rise in casualties of older concerns, more than half of the total failures continued to occur among businesses less than five years old. One out of every three failing companies were in their first three years of operation.

THE FAILURE RECORD

	July 1958	June 1958	July 1957	% Chg.†
DUN'S FAILURE INDEX*				
Unadjusted	54.1	56.7	44.5	+22
Adjusted, seasonally	58.2	57.3	47.8	+22
NUMBER OF FAILURES.	1253	1260	1059	+18
NUMBER BY SIZE OF DEBT				
Under $5,000	175	147	165	+ 6
$5,000–$25,000	583	605	530	+10
$25,000–$100,000	381	378	279	+37
Over $100,000	114	130	85	+34
NUMBER BY INDUSTRY GROUPS				
Manufacturing	255	235	181	+41
Wholesale trade	105	125	74	+42
Retail trade	613	640	570	+ 8
Construction	181	161	153	+18
Commercial service	99	99	81	+22
LIABILITIES (in thousands)				
CURRENT	$65,375	$61,445	$44,299	+48
TOTAL	67,255	62,174	44,470	+51

*Apparent annual failures per 10,000 enterprises listed in the DUN & BRADSTREET *Reference Book*.

†Percentage change, July 1958 from July 1957.

In this record, a "failure" occurs when a concern is involved in a court proceeding or in a voluntary action likely to end in loss to creditors. "Current liabilities" here include obligations held by banks, officers, affiliated and supply companies, or the governments; they do not include long-term publicly held obligations.

This report was prepared in the Business Economics Department, by Rowena Wyant.

Profit "squeeze-play" that works

(or how Burns can save you 20% on plant protection)

Our recently completed study of a cross section of top American businesses showed that most could save upwards of 20% on one major cost by a simple operational switch.

That switch is to Burns Contract Security Service for Plant Protection.

The reasons are clear and basic: Burns puts trained, supervised men on the job, pays all administrative and operating expenses (uniforms, side-arms, etc.) and pays all fringe benefits including overtime, vacations, Social Security, insurance, et al.

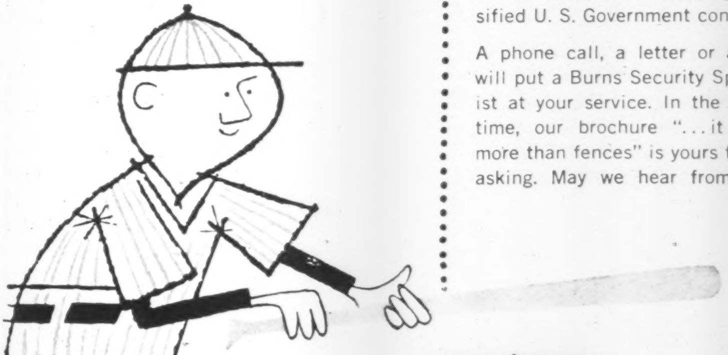
Thus the guard force is handled at a rate commensurate with its functions and is not (as is often the case) arbitrarily tied to other productive labor costs.

Furthermore, Burns Service provides trained, competent personnel and 'round-the-clock supervision for free.

We'd be glad to make a survey and cost analysis of your plant protection program at no cost or obligation and we're pretty sure that such an analysis will show you how to save at least 20% ... maybe more.

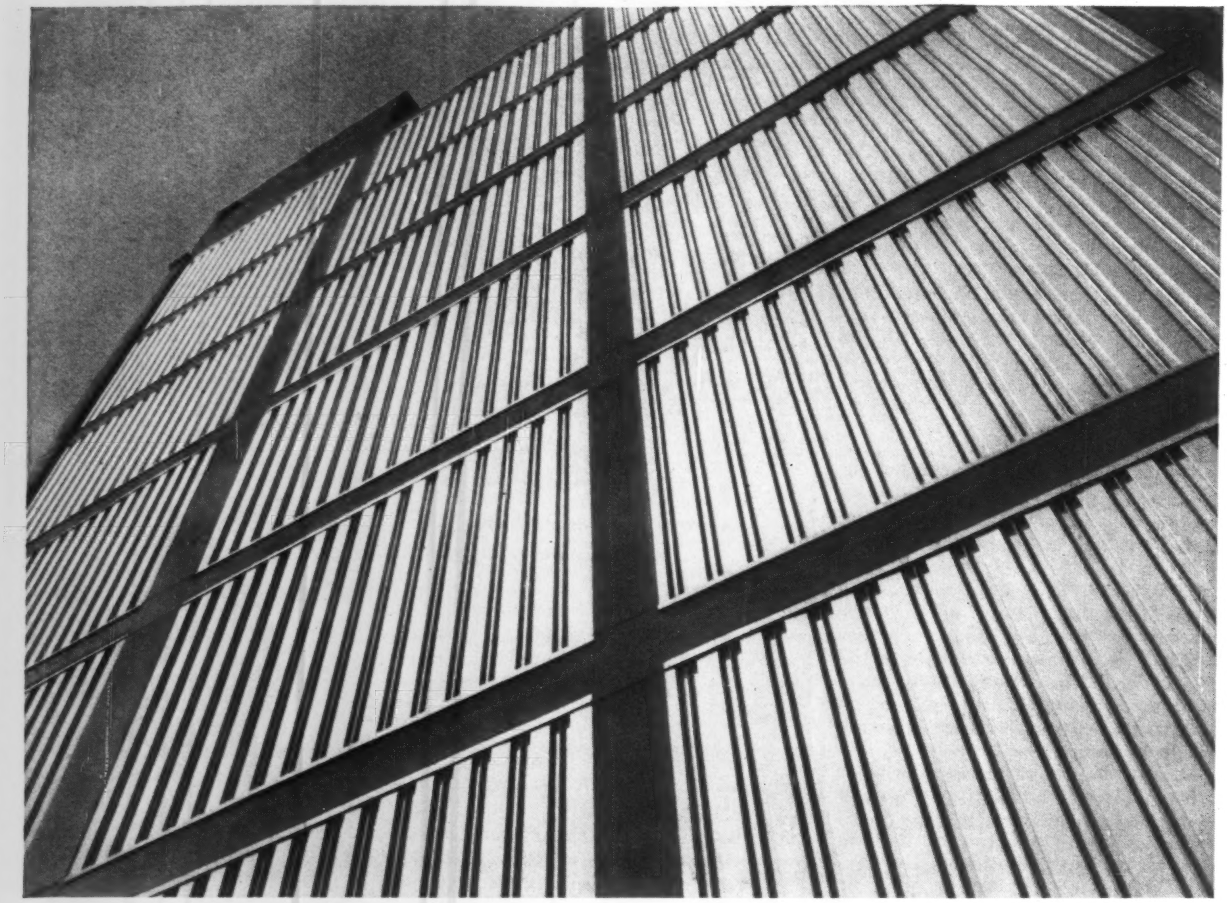
Whether you're in banking or ballistics... whether you're a brewer or a baker, Burns can be of service ... at a saving. Incidentally, a lot of our clients are handling classified U. S. Government contracts.

A phone call, a letter or a wire will put a Burns Security Specialist at your service. In the meantime, our brochure "... it takes more than fences" is yours for the asking. May we hear from you?



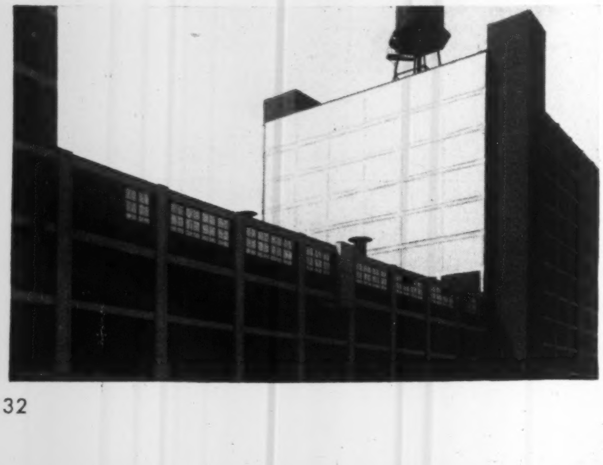
Offices in principal cities SECURITY BURNS SERVICES *throughout the world*

THE WILLIAM J. BURNS INTERNATIONAL DETECTIVE AGENCY, INC.
EXECUTIVE OFFICES: 101 PARK AVENUE, NEW YORK 17, NEW YORK



Stainless Steel wall allows three extra floors

Building Owner: E. J. Brach & Sons, Chicago, Illinois
Structural Engineer: J. A. Scanlan, Evanston, Illinois
General Contractor: C. E. Erickson Company, Chicago, Illinois
Stainless Steel Fire Wall Fabricator: The R. C. Mahon Company



Originally, this building had five floors. When the owner planned to add more floors, it was determined that if they continued upward with the original wall materials, the building's exterior columns and footings on one elevation could only support three more floors. *Six* more floors were needed, so a Stainless Steel curtain wall with a two-hour Underwriters' rating was erected and *six* floors were added. This was possible because Stainless Steel curtain walls are so much lighter—only 17 lbs. per square foot instead of 85 as in the original structure.

In a new building, the lighter weight of steel curtain walls reduces the cost of foundations, structural steel and labor. And the building can be occupied sooner because curtain wall construction is a fast way to build.

If you plan to expand your present building, or erect a new one, be sure to discuss steel curtain walls with your architects and engineers. For more information, write to United States Steel, 525 William Penn Place, Pittsburgh 30, Pennsylvania.

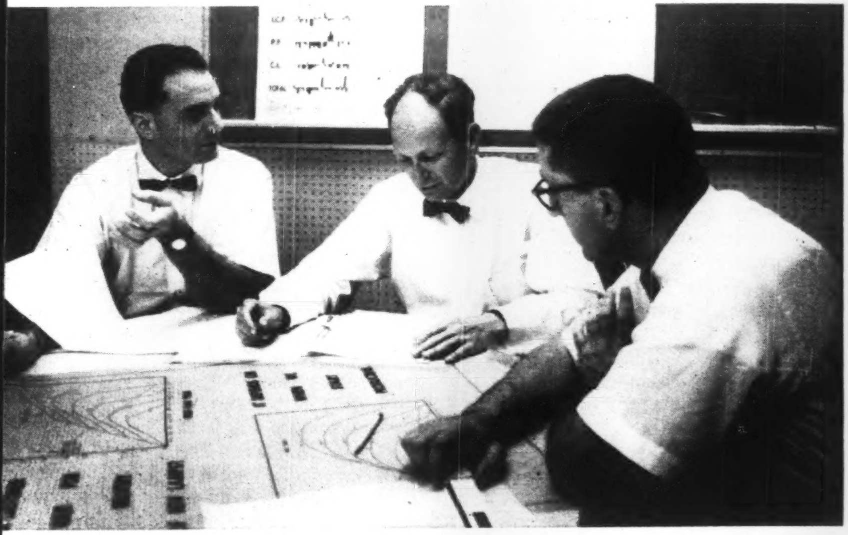
USS is a registered trademark

USS

United States Steel Corporation – Pittsburgh
American Steel & Wire – Cleveland
National Tube – Pittsburgh
Columbia-Geneva Steel – San Francisco
Tennessee Coal & Iron – Fairfield, Alabama
United States Steel Supply – Steel Service Centers
United States Steel Export Company

United States Steel

How Top Management Forecasts the Future



MELVIN J. GOLDBERG

Highlighting the whys and hows of company forecasting practices, this new survey reveals that some top managements are still putting as much faith in hunch and intuition as in statistics and economic indicators.

NOT LONG AGO, the sales manager of an eastern hardware manufacturer sat down to chart his company's prospects for the coming year. Priding himself on his skill as an amateur statistician, he used every device in the textbook.

First, he had each of his salesmen estimate future orders for the period. That gave him one set of answers. Then he worked up a second forecast, based on an elaborate statistical correlation of his company's past sales with population growth. Finally, he developed a set of figures by projecting the industry's growth over the last decade and his company's traditional share of the total market.

All three methods yielded results within a 10 per cent range. And so the sales manager confidently passed them on to top management, which promptly ordered a build-up of inventories and started drafting plans for a new plant to meet the expected surge of demand.

Now, one year later, the plant is still on paper and the company president is frantically working down his stock of raw materials—a one-year supply, at present rates of production. And the sales manager, his reputation as a statistician considerably tarnished, no longer tries to play oracle. He had overshot the mark by 40 per cent. Nowhere in his calculations was there any allowance for changes in the general level of business. When the recession set in, the company's sales dropped sharply.

Accent on foresight

In most companies, sales forecasts have a long and honorable history. But until the last decade, few made any systematized effort to predict general business trends. Today, at the tail end of the sharpest recession of the postwar period, companies are peering more intently than ever before into the distant, often cloudy, economic future. Object: to reduce the hazards of decision making to the unavoidable minimum.

In some ways, general economic forecasting is even more difficult than sales forecasting. To some extent, it is in every company's power to determine its own sales level. A better design, a lower price, a new advertising campaign, among many other things, can affect the total.

But when it comes to the general level of business, almost all companies are humble spectators. Nothing they do or don't do can affect the broad economic indicators. But it's a rare company that isn't affected, one way or another, by the broad ground swell of the economy.

"The choice for business men is not 'to forecast or not to forecast,' " says Edmund R. King, chief statistician of the Eastman Kodak Company. "Failure to make an explicit forecast really reflects a dangerous type of forecast—that conditions will not change much." And in the life span of today's business leaders, that's the one forecast that has almost never come true.

Is forecasting worthwhile?

Just how valuable is economic forecasting as a management tool? How reliable can forecasts be, and how can they be turned to practical use in reaching business decisions? Have company forecasts actually paid off in dollars and cents during the current business recession, and are they likely to again in the future?

To find the answers, DR&MI questioned the presidents of a cross-section of manufacturing and trade companies. The replies, from top executives of 77 companies of all sizes across the nation, paint this broad picture of economic forecasting by business:

- Only the larger companies have a formal program for economic forecasting, but almost all company presidents watch general trends and relate them to their business.
- Few chief executives claim to have predicted the current recession "on the nose," but their batting average on this point is a respectable one.
- Most presidents rate forecasting as valuable, but with many qualifications.

Straws in the wind

In reaching their economic forecasts, the company presidents depend on many different sources of information. Almost all draw on newspapers, magazines, bank letters, trade papers, and government publications. Many also depend on personal contacts with their bankers and business associates.

About a third of the replying companies, generally the larger ones, assign a staff member or department the job of analyzing economic data and preparing a formal report for top management. Another quarter of the companies—again, usually the larger ones—engage an independent economic research consultant. A few companies have both a staff forecast and an independent consultant, using each as a check against the other.

Rarely does the economics department or the outside consultant have the last word on the forecast. It is usually reviewed at a meeting of the president and senior operating officials, or by the board of directors, where it is modified in the light of these men's opinions and experience. This procedure, a few of the presidents candidly observe, may be far from objective.

Pros and Cons of Business Prophecy

Although most big companies practice it in one way or another, economic forecasting has by no means won the universal and unqualified confidence of top management. Not many executives will condemn it out of hand as useless, but a sizable minority seem to feel that most forecasts necessarily rest on so many uncertain assumptions that heavier reliance should be placed on other, more concrete planning guides. Here is a sampling of top management opinion from the survey:

We find that a general economic forecast is a valuable tool in formulating plans for the future growth of the company.

D. E. Abbott, Asst. to President,
Crown Zellerbach Corp.

In today's complex economy, it would be very difficult to operate without a general business forecast.

T. F. Patton, President,
Republic Steel Corp.

The experience of recent years has emphasized the importance of business forecasts.

C. E. Masters, Vice President,
National Gypsum Company

Indispensable.

T. S. Petersen, President,
Standard Oil Company of Calif.

We have never been able to find an index which would reliably forecast the future of our particular segment of the machine tool industry.

E. P. Bullard, President,
The Bullard Company

General business forecasts are only one of several tools we use in sales forecasting.

A. B. Goetz, President,
Western Electric Company

Forecasts are weather reports on the business climate—they are nothing more.

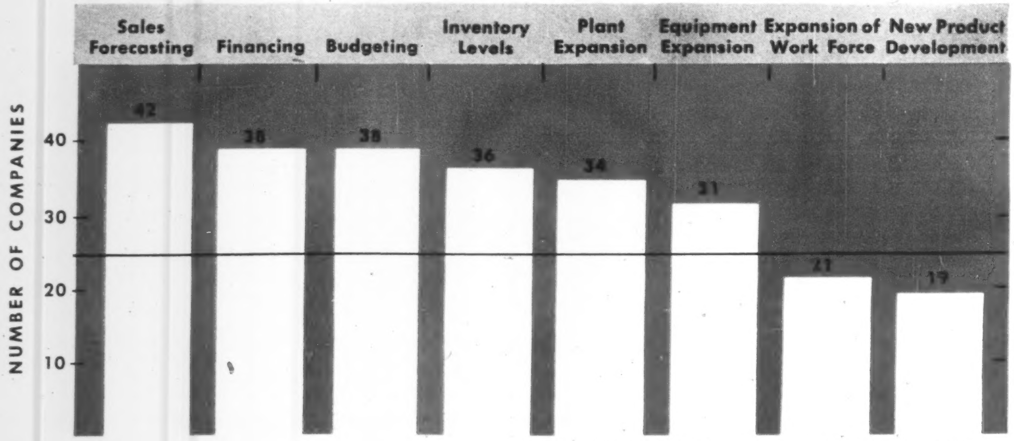
J. M. Billane, President,
Dunlop Tire and Rubber Corp.

Forecasting is not for humans.

D. Benedict, President,
Frick Company

How Companies Use Economic Forecasts

Companies participating in the survey find economic forecasts helpful in a number of decision areas. (Most companies checked more than one.)



"Theoretically, our business forecasts are based on the expected trend of eight or ten principal business indices," says the president of a large paper manufacturer. "Actually, my intuition and sub-conscious evaluation play a big part."

In smaller companies, which lack a staff or independent forecast, the final decision is apt to be weighted even more heavily—sometimes entirely—by the experience and judgment of the chief executive. The president of a small toy concern admits to reaching his conclusion about the business future "by the highly unscientific seat of my pants."

About half the companies make their forecasts quarterly, for the coming twelve months. Except for a few that forecast monthly, the other companies make their forecasts semi-annually or annually. Several of the companies report making long-range forecasts, up to 25 years in one case, for special purposes.

After the forecast is prepared and accepted, it is generally routed to all officers and the board of directors, and to the management committees concerned with policy and planning.

More than half the company forecasts include recommendations for specific actions. Executives are usually required to stick to these recommendations in their planning.

But the rest of the concerns still allow their executives considerable freedom to follow or ignore the forecast, as they see fit. Typical is the reply of one furniture company president: "We look upon the forecast as a kind of benchmark, so that all our people can start their thinking on the same set of economic assumptions. From that point on, they're on their own."

Putting forecasts to work

In almost all responding companies, the general economic forecast is used as a preliminary first step in forecasting sales. Many also use their forecasts as an aid in projecting operating results, production, profits, and cash requirements. Often the forecasts are also helpful in budgeting, financing, deciding inventory levels, and planning expansion of plant and equipment. Relatively few companies rely on their forecasts in developing new products and planning future personnel requirements.

Most of the company presidents are relatively pleased with the accuracy of their predictions in the past. None lay claim to perfection, but most say they are right at least three-quarters of the time. Small companies, despite the lack of a formal program or outside consultants, claim about the same degree of success as the large ones.

More than half the companies say they predicted the present business slump before the middle of 1957, when most of the business press was looking to the future with unrestrained optimism. By the end of the third quarter of 1957, almost all of the company presidents saw trouble ahead.

These recession forecasts were best with respect to timing, weakest when it came to judging the depth and length of the downturn. Most predictions indicated the recession would be shorter and less severe than it actually turned out to be.

Once they saw the economic weather vane pointing toward "slump," most of the company presidents resorted to the traditional strong medicine: they delayed or abandoned

continued on page 129

Putting the Forecast Together

Only a few small companies have any formal program for making economic forecasts. One of these is Lightolier, with 800 employees. The company manufactures lamps and lighting fixtures at plants in Jersey City, N.J., Chicago, and Los Angeles.

Demand for Lightolier's products comes from two major sources: new construction and replacement of furnishings. Consequently, predicting the company's prospects is largely a matter of forecasting future construction, retail furniture store sales, and department store sales.

As a first step in making the forecast, company economist David S. Elkin estimates the gross national product and its major components. This is based on a study of major statistical indicators, studies of future business spending plans, and informal conferences with government officials and industry experts.

The GNP forecast is then used to help forecast the specific series the company is interested in. In predicting new construction, the published statistics on construction awards, building permits, and housing starts are also helpful. In gaging the future course of retail sales, Elkin depends more on the GNP predictions.

To convert the general economic forecast into management decisions, the company has a number of techniques. "We've developed some formulas that give beautiful results," says Elkin. "We feed the forecast into the formula, turn the crank, and out comes a reliable answer."

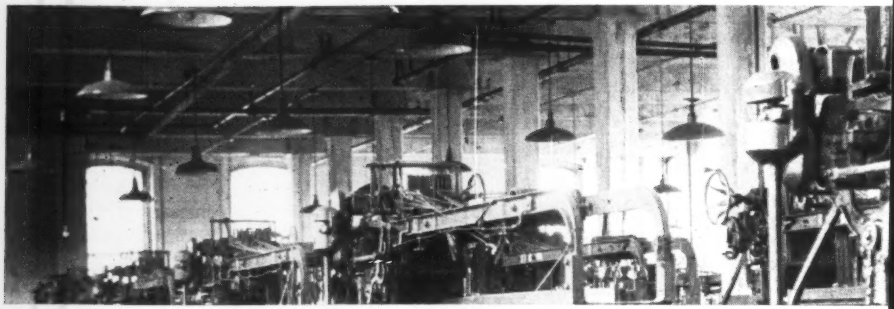
Not all the economic predictions are so easily handled, he admits. "There are some economic factors that affect the company, but not in any neat, mathematical way. For those, we just have to use our judgment and make an estimate."

While Lightolier's economics department is working up the general economic forecast and the sales predictions based on it, the sales and merchandise divisions each develop their own sales forecasts. The three sets of forecasts, each arrived at independently by a different route, are reviewed by the planning and results committee, and the final levels adopted.

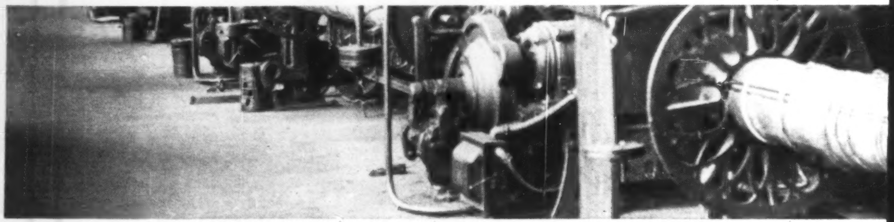
As for results, the company says the forecasts have helped cut its inventory-to-sales ratio sharply, while improving customer service and cutting delays in deliveries. Both layoffs and overtime, once troublesome to the company, have been reduced.

Economist Elkin predicted the recession in June of last year. With the aid of the early warning, the company glided through the recession with barely a ripple in its workforce or inventories, and is emerging in strong financial shape.

"We find that general economic forecasts, carefully and professionally done, offer a guide—backed up by the facts—that causes our executives to be a little less intuitive and a little more factual and careful in making their future plans," says Robert S. Moss, financial vice president. "There's no doubt that our close attention to forecasting and planning is constantly saving us great sums of money."



Cobwebs on the P&L Statement



A Survey of Obsolescence

A DR&MI Staff Report

Even though America's manufacturing plant is in pretty good shape, a sizable minority of medium-size manufacturers are so slow to undertake new equipment purchases that their profits are taking a beating.

THE OUTLOOK for the "not so big" manufacturers is brightening—in fact, it was never so dark as it was painted, according to a June-July survey conducted by DUN & BRADSTREET, INC., through face-to-face interviews in 44 key industrial centers. This statistical silver lining in the recession cloud, however, does not minimize the dangers some companies in this category are running because of their neglect to modernize their plants and equipment.

The industrial giants have publicly stated their degree of inactivity and their plans for improvement and reactivation of equipment. In the middle manufacturing category, however, more light has been needed. Estimates of plant idleness, which have ranged as high as 40 per cent, have been vague and unfocused. To obtain a clearer view of plant activity in medium-size companies and of the relative influence of equipment obsolescence on recovery, DUN & BRADSTREET's financial analysts and investigators called on 367 manufacturers with an average net worth of $7.5 million and a median net worth of $2.5 million. The sales volume of these companies ranged from $1 million to $100 million, with the largest group in the $5 million to $10 million category.

Many still at peak

From the figures gathered by the researchers it appears that the amount of plant idleness among medium-size manufacturers has been somewhat exaggerated in many recent estimates. Some 228 of the 367 companies questioned reported that none of their equipment was completely idle, and another seventeen said that the idle facilities amounted to less than 10 per cent.

While some in these two groups had curtailed production substantially, 99 companies—more than one-fourth of the entire sample—were producing as much or more than they did at any time during the past two years. In other words, they were entirely unaffected by the 1958 recession.

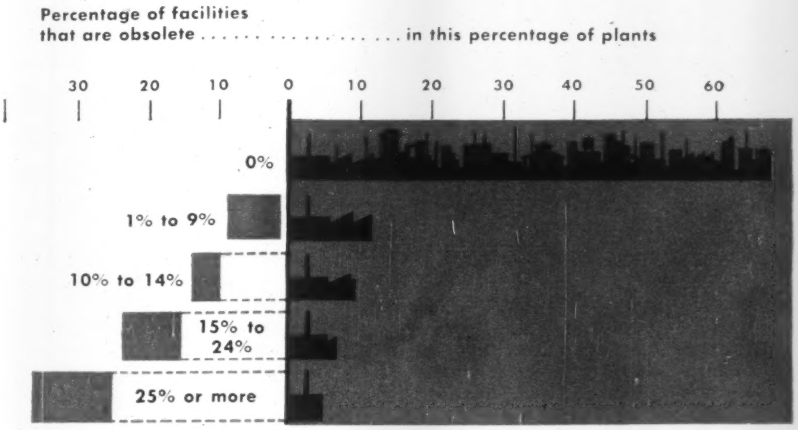
And the group at the opposite end of the scale was somewhat smaller—only 75 companies reported that 25 per cent or more of their equipment was completely idle. Only 97 reported that they were producing at less than 75 per cent of capacity, and in only 59 of these had production fallen by as much as 35 per cent.

The differences between companies may be partly, but not entirely, ascribed to industry differences. Thus, while hard goods and textile manufacturers, particularly in the East and the Midwest, appeared to have greater sales and financing problems than food processing, drug, and chemical companies, there were many concerns in durable goods and textiles that reported excellent operating records.

In the case of the textile plants, only 4 per cent were operating at less than 75 per cent of their best production in the past two years, and 70 per cent were operating at 90 per cent or better. (Of the apparel plants, 75 per cent were working at 90 per cent of the peak or better.) In the electrical field—where the peak production of the last two years was probably a greater percentage of capacity than in textiles—52 per cent were operating at 90 per cent of peak or better. Among fabricating metal plants, excluding the machinery and transportation equipment companies, 40 per cent were operating at 90 per cent of peak or better. These figures from areas where there have been loud complaints about lost volume indicate that a large number of companies have been doing fairly well in depressed markets.

Sizing Up the Challenge

By their own appraisal, one-third of all plants replying in Dun & Bradstreet's survey have productive facilities which are obsolete.



Heart of the matter?

The amount of completely idle equipment was, perhaps, more closely correlated with the extent to which plant and equipment had been allowed to become obsolete, and so was the extent to which plants were able to maintain full production.

Specifically, the top three-fourths of the companies surveyed were operating, on the average, at 95 per cent or more of their peak rates of the past two years, and only 1 per cent of their facilities was obsolete. The lowest group—whose production was averaging less than 65 per cent of their peak rates—admitted to an enormously greater percentage of obsolete equipment, 22 per cent on the average. For the group as a whole, the average was 4.4 per cent. The plants with greater percentages of idle equipment tended also to be those with larger amounts of obsolete facilities.

Even more significant: For the top three-fourths, the savings to be achieved by further modernization would amount to only 0.4 of 1 per cent of production costs; for the bottom one-fourth the potential saving was 6.5 per cent.

And 40 per cent of the latter group stated that with the cost reductions resulting from complete modernization, they could sell their capacity output at a reasonable profit.

Why the delay?

Why, then, don't they modernize? The answer depends on complex factors—competition, expectations for the future, and ability to obtain the necessary funds cheaply enough. But in many cases—especially among the group that was confident it could sell the increased output at a reasonable profit—these factors do not appear to justify a "do nothing" policy.

From the survey comments, it is apparent that the hesitancy is frequently due to psychological reasons. Some managers recognize the opportunity, but prefer to stay put for personal reasons. Others in the group where 25 per cent obsolescence is prevalent may be refusing to face the facts of industrial survival.

One manufacturer of auto parts, for example, states he would consider modernization only if orders on hand outran plant capacity. Another would like to install a new furnace that would make it possible to do certain

continued on page 133

What Price Obsolescence?

One out of every four plants with obsolete equipment estimates that production costs could be reduced by 10 per cent or more if all obsolete facilities were replaced with up-to-date equipment. And among plants with 15 per cent or more obsolete facilities, three out of eight plants would expect cost reductions of 10 per cent or more through complete modernization.

	Percentage reduction in costs					
Proportion of obsolete facilities	0%	1-4%	5-9%	10% or more	Not known	Total plants
0%	. .	. .	. .	. .	. .	**248**
1% to 9%	**5**	**11**	**3**	**6**	**18**	**43**
10% to 14%	**1**	**10**	**4**	**11**	**8**	**34**
15% to 24%	**1**	**5**	**5**	**9**	**4**	**24**
25% or more	**2**	**2**	**3**	**6**	**5**	**18**
Total respondents . .	**9**	**28**	**15**	**32**	**35**	**367**

Executive Pay Feels the Pinch

ARCH PATTON

Across-the-board executive pay cuts in some companies have made business headlines in recent months—and in many others, the recession has thrown a harshly revealing light on poorly conceived and badly administered compensation plans.

CONFRONTING A DRASTIC decline in earnings, the president of a large company recently went to his board of directors with a recommendation for a cut in the dividend. At the same time, he suggested that salaries of the company's top 22 executives—including himself—ought to be reduced 10 per cent. This, he thought, would make a dividend cut more palatable to the stockholders.

A committee of outside directors carefully studied both proposals. The question was not whether the dividend should be reduced, but how much. In reviewing the pay cut recommendation, however, the directors found:

- that a number of executives slated for a pay reduction were already underpaid, by industry standards
- that the underpaid men were outstanding younger executives — and that they included the *next* top management of the company
- that two brilliant younger executives had recently left the company, presumably to get more money
- that the company's executive bonus plan accounted for approximately half the total compensation of this group and that any cut in bonus payments, resulting from reduced profits, would further aggravate the problem
- that the company had no organized basis for compensating its executives; the president used his best judgment, but in a good many cases the "squeaky wheels" had received priority treatment and seniority counted more than performance.

Commenting on the background aspects of this situation, one of the directors remarked: "For fifteen years our sales and profits steadily climbed. The present top management of the company has never been subjected to the cleansing fire of recession. So I suppose we should expect a slump to uncover careless administrative practices that grew up during boom years."

Unquestionably, the 1958 recession has put the spotlight on industry's executive compensation practices. As might be expected after a long era of good business, quite a number of weak points have showed up. The recession experiences of a representative group of companies in the executive compensation area may hold some lessons for other top managements.

Until quite recently, executive shortage has been so acute that standards of expected executive performance were frequently so elastic as to be almost meaningless. Now, for the first time in many years, the recession has forced industry to evaluate the contribution made by individual executives to the profitability of the company.

Survival of the fittest

In the harder-hit industries, this has resulted in the elimination of many positions. To an observer, some of these decisions seem to have reduced the staff planning and control function more heavily than the line functions. In fact, many slashes of the axe seem to have cut into muscle as well as fat, for the competitive edge in many companies comes from skillful planning and control.

The yardsticks used to judge expendability have often left something to be desired. Many a position has been eliminated because headquarters ordered a 5 per cent or 15 per cent "across the board" payroll reduction, chiefly among down-the-line employees. This meant that tightly-run divisions or departments had to eliminate useful positions, while loosely run units might still have relatively useless jobs on the payroll after the cut.

Some companies in highly competitive industries found that the relaxed recruiting standards of the war and postwar years had left them with an unusually large proportion of executives who did not measure up to the rigorous demands of a competitive economy.

In prewar years, apparently, there was a tendency for security-minded people to gravitate to the more secure jobs in banking, insurance, utilities, government, and the like. On balance, these are the lower-paying industries. During the war-born executive shortage, however, these security-minded men began to drift into the higher-paying positions in more competitive industries—automotive, textile, retail, chemical, appliance, and so on—which demand entrepreneurial risk-taking ability in their executives. The recession has exposed the weaknesses of men like this, and intensified the shaking-down process in many companies.

Riding the size curve

Directors and top executives have generally recognized that company size—its sales, payroll, invested capital, and profits—has a great deal to do with executive pay. In recent years this has been reflected in rising industry compensation levels.

However, many companies, and even whole industries have followed their rising curve of size not wisely but too well. This has generally resulted from one or both of the following practices:

- *Paying straight salary, and pushing salaries up as fast as size increased.* Thus, with 1958 showing sharply reduced size factors—such as sales and profits—salary levels are at least temporarily stranded on high ground. Companies with profit-based bonus plans, of course, can absorb these setbacks by reducing bonus payments. But salaries are more difficult to cut back.
- *Gearing compensation increases to the fastest-rising of the size factors.* For example, some industries enjoyed unusually high profit margins in several recent years because their products were in short supply and prices were unrealistically high. Thus, profits increased many times faster than sales. In turn, sales rose faster than payroll or invested capital. By relating the rise in executive compensation in such companies to profits, rather than other more realistic size factors, compensation turned out to have been pushed too high when margins returned to competitive levels this year. Companies with profit-based bonus plans were in a better position to absorb this turnabout than those paying straight salary.

Where salary problems start

For the first time in fifteen years, as a result of the recession, some companies have reduced executive pay. Often the step was necessitated by

continued on page 147

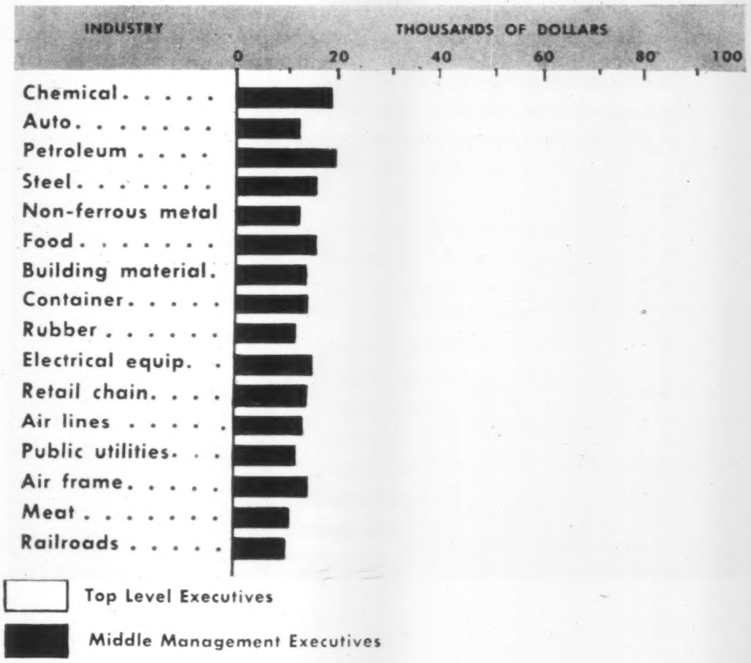
Who Pays Executives Most?

Management compensation—in the case of both the top policy-making group and middle management men—varies widely by industry, a recent survey of 71 large companies in sixteen industries indicates.

The survey, which was conducted by McKinsey & Company, covered the highest-paid 1 per cent of each company's employees, a group that takes in middle management in most cases. Policy-making executives constituted the top one-tenth of this 1 per cent; the middle managers were defined as the lowest three-tenths.

The high-pay industries, so far as executives are concerned, turned out to be chemicals, petroleum, steel, and food. Lowest-paid were railroads, meat packing, public utilities, and airlines. In most cases, nearly two-thirds of the sample, companies that pay policy-makers above the average also pay middle managers unusually well, but there are exceptions. In automobiles, for example, top management's compensation is above the average, while that of middle management is below it. Conversely, electrical equipment and airframe manufacturers pay their top management below-average compensation but do better than average by their middle managements—possibly because of their acute need for technical talent.

In general, however, there tends to be less variation between industries where middle management compensation is concerned than in the top management area.



Top management: Average compensation of top 0.1% of payroll
Middle management: Average compensation of top 0.71% to 1.0% of payroll

THE PRESIDENTS' PANEL

REFORT NO. 8

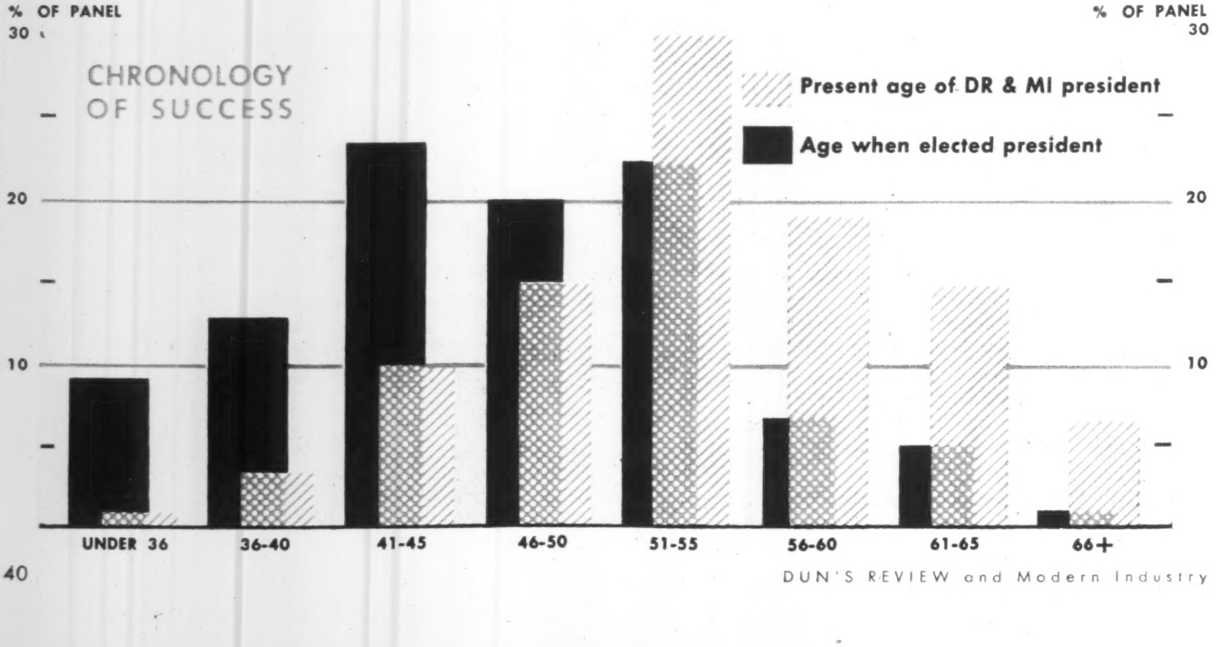
Top management personnel decisions can seldom entirely neglect the crucial factor of age. In a new survey, DR&MI Panel presidents take a critical look at the business age problem—and the personal problems of their own retirement.

Top Management Looks at EXECUTIVE AGE and RETIREMENT

KENNETH HENRY, *Executive Methods Editor*

THAT THE BEST years of a top executive's life may have little to do with calendar age is a truism. Yet mandatory retirement based on calendar age is more the rule than the exception in U.S. business. And executives, unlike skilled diemakers and Congressmen, cannot necessarily expect additional privileges and authority from seniority. In fact, a top management man may himself believe that it is better for his company not to hire older executives—and that, in principle, his own departure at some fixed age is in the company's best interest.

At what age should a man be elected president of his company—and what are an executive's most productive years? What is the average age of the top management team today?



Should policy exceptions be made for the president when his retirement comes up? And does the president face his own retirement with equanimity—or does he dread it as a premature end to his career? When retirement finally does come, what does he plan to do with himself? Can—and does—his company do anything to ease the transition?

These are some of the basic policy and human aspects of age and retirement that 162 company presidents—a cross-section of America's industrial leadership—were asked to consider in DR&MI's latest Presidents' Panel survey. Retirement for these presidents is generally ten or fifteen years ahead.

The top man and his team

Typically, the company president is now 55, and has held his present job for seven years. Usually, nine subordinates, slightly younger than the president, make up the executive team reporting directly to him. Nine times out of ten, he considers the age of his team (median 52) "about right," believing that an executive's most productive years are between 40 and 60. Four to one, he personally favors compulsory retirement in principle, and three to one, his company policy requires it for executives as well as others. Even though he may still be quite young, he probably has a successor in mind for his own job, in keeping with his belief that an executive should start training a successor between the ages of 49 and 50—or from the moment he assumes a new position or is elected to office.

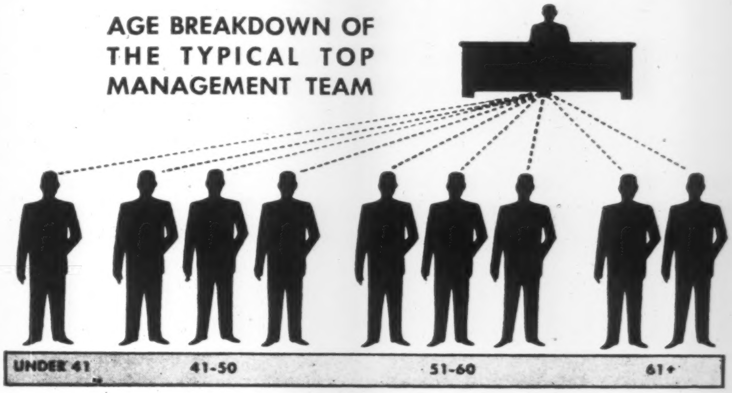
This composite chronological portrait, of course, smooths out the many individual variations reported. Actually, the presidents were elected anywhere from the age of 27 (4 per cent of the Panel had reached the top by age 30) up to 68. The typical panelist got his post at 48.

In view of this fact, it is not surprising that he believes that between 47 and 49 years of age is the ideal age for a man to become president of a company. At such an age, he naturally has enough experience and knowledge of his company, and enough years of service ahead of him, to guide his long-range plans to success.

Age and job performance

Since the span of nearly half a century separates the youngest from the oldest man on the DR&MI Panel—they range in age from 29 to 72—whether the president sees any job-related advantages and disadvantages in his age varies widely. Fully 36 per cent of the men believe their present age gives them no job *advantages* and, looking at the coin from the other side, 70 per cent see no job *disadvantages* in their current age. A substantial group, nearly four out of ten men, ranging in age from the early forties to the low seventies, consider their experience a primary asset of their age. Says one president: "More and wider experience eases the pressures." Others in their later years believe that long experience has given them a "fair knowledge of people and the capacity to select and educate successors to back the top position and top department heads."

AGE BREAKDOWN OF THE TYPICAL TOP MANAGEMENT TEAM



ON THE AVERAGE, *nine subordinates report directly to the typical DR&MI Panel president (although his span of control ranges from two to twenty executives). The average subordinate on the top executive team is 52 years old—the president's own age. And 91 per cent of the DR&MI panelists think that their executive team is "about the right age," compared to 8 per cent who say "too old," and 1 per cent "too young."*

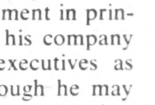
In contrast, almost one out of ten presidents (ranging in age from the high thirties to the mid-forties), considers his inexperience a definite disadvantage. Commonly, this group makes such comments as: "Could have used more seasoning," or "Still need more experience and longevity in job to be most effective with others of greater experience." But some younger men say they are helped in their jobs by such qualities as aggressiveness, "non-complacency," imagination, and "animal energy."

Some age hazards

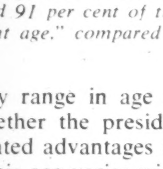
Long-range planning is easier for the younger president, too. He makes plans with some confidence that his administration will have the continuity to see them through. In contrast, some of his seniors regret that they are "too old for the execution of long-range plans made now" and add, as does one 68-year-old man, "Imminence of retirement hampers me in selling long-term plans." As might be expected, older men cite declining

continued on page 137

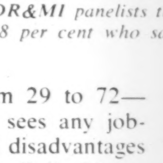
AMONG THE DR&MI PANEL MEMBERS ARE THE PRESIDENTS WHOSE PICTURES APPEAR AT RIGHT. A COMPLETE LIST WILL BE FOUND ON PAGE 70, DR&MI, JULY 1958.



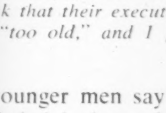
Leston Faneuf
Bell Aircraft Corporation



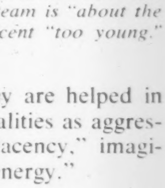
J. Albert Woods
Commercial Solvents Corporation



Alfred J. Marrow
Harwood Manufacturing Corporation



W. B. Prosser
Perfect Circle Corporation



David L. Luke
West Virginia Pulp and Paper Co.

Pace of General Dynamics

"No matter how good our civilian sales become, we'll always be interested in defense business."

Gehling of Apex Reinforced Plastics

"Right now everyone is down in Washington looking for Government business. It's a constant battle."

Wendt of All-American Engineering

"Have to be opportunistic. Can't stick to a definite ratio between Government and civilian."

Defense Business: How Much Is Enough?

MELVIN MANDELL, *Industrial Editor*

JUST AS Sputnikomania was beginning to subside, the crisis in the Middle East has come along to remind us that the United States is sure to remain committed for years, if not for decades, to burgeoning defense contracts.

To find out how companies around the country, large and small, are learning to live with Government business as a permanent fact of economic life, DR&MI editors interviewed dozens of executives in manufacturing companies that have or are seeking Government contracts. What balance do they want to achieve between Government and civilian business? And what steps are they taking to reach the goal? Most of the executives interviewed talked frankly, although some asked that their names be withheld because they feared to offend their best customer—the Department of Defense, which lets by far the most and the largest contracts.

With a growing hunk of the gross national product devoted to military hardware, many companies with little Government business are quite understandably making serious efforts to get defense contracts or add to those they already have—especially if the recession has slowed or closed down some of their production lines.

Other attractions

And there are other strategic reasons why civilian-based manufacturers are seeking to crack the military market. Some see Government contracts as another possible avenue to diversification. Others feel that if they can get some Government contracts now, without committing any major part of their resources, they will have a foot in the door at the Pentagon in case world developments lead to an even greater industrial mobilization. For still others, the main objective is participation in what Robert Weaver, president of Bettinger Corp., Waltham, Mass., calls "the most advanced technology in our field." (In many instances security regulations prevent a company from working in an advanced field unless it has a military contract.)

There are also some lesser fringe benefits. For example, defense contracts usually support a greater number of engineers than civilian business, which means that a company can obtain and hold creative technical men who will be valuable in civilian business later on.

Cutler-Hammer, Inc., of Milwaukee, is a good example of a civilian-based organization that is moving into military sales. Its main avenue has been through acquisition of Airborne Instruments Laboratory, Inc., Mineola, N.Y., essentially a developer of advanced military gear. Low on military sales since World War II, Cutler-Hammer can now back up its new division with the production facilities and working capital needed to tackle really big defense contracts. At the same time, Airborne has the technology to develop unusual industrial electronic devices to supplement the parent company's recession-hit civilian sales.

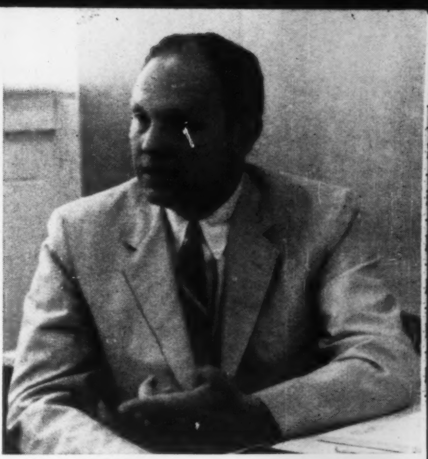
On the other hand, plenty of defense-oriented companies are headed in the opposite direction. All-American Engineering in Wilmington, Del., is a fair example. Since its Government sales had been dropping off steadily in the past few years, All-

Thornton of Litton Industries

"There is as much need for long-term planning in Government as in civilian business."

Weaver of Bettinger Corp.

"Government contracts give us a chance to work at the most advanced technology in our field."



Kern of Miniature Precisions Bearings

"Under the weapons systems concept, pools of companies going after prime contracts are the coming thing."

American began to seek civilian markets for its special skills. Its brightest development is an electric hoist with a magnesium body that is light enough to be carried about by one man, but can lift 6,000 pounds. Although it is more expensive than present factory hoists, Charles W. Wendt, the company president, asserts that it can in effect save a purchaser money because a plant would need fewer hoists if those it had were not limited to monorails and fixed positions.

There are some defense contractors who have elected to concentrate even more heavily on the growing Government business, and some (like Raytheon and Du Mont) are even withdrawing from tough civilian markets.

Going civilian

But a significant number of companies with a preponderance of Government business are pushing vigorously into civilian markets. Their executives agree with John J. Brogan of Cleveland Pneumatic Industries that military sales still have too many dangers and uncertainties. Despite Secretary of Defense Neil McElroy's recent statement that there will be no more cash shortages, they can't forget the budget squeeze of 1957, when contracts were abruptly cancelled or payments stopped.

Some companies also object to the profit ceiling imposed on defense contracts by the Renegotiation Act, or wail about Government auditors who disallow what most consider "normal costs of doing business." Some are apprehensive about the profit squeeze resulting from the rising cost of bidding on defense contracts. All want to balance their less-profitable military sales with potentially more-profitable civilian sales—but without giving up any defense business.

Also, says Joseph H. Davis of Epsco, Inc., Boston, smaller companies are finding it harder to get Government business under the new "weapons system concept," and even the representatives of large corporations agree. John A. Gehling, general manager of Apex Reinforced Plastics, Cleveland, fears that now primes are in a stronger position to subcontract to "favorites" among their suppliers.

Lack of planning

Unfortunately, too many companies are seeking balance between civilian and military sales without a definite plan or clear objectives. In the words of one management consultant, they are "blowing hot, then blowing cold" on balancing. But several organizations are using a coordinated, long-term approach. Although other company needs are, of course, considered, balancing has been set up as a separate goal, not to be achieved haphazardly or as a by-product of other policies.

The nine U.S. companies of International Telephone & Telegraph Corp., for example, have just embarked on a five-year plan to achieve a 50-50 balance instead of their present 65-35 ratio in favor of military sales. They expect to reach the 60-40 mark by internal development without too much effort, but the last 10 per cent will call for running taut ships.

Although setting a goal for balance between Government and civilian business is pretty much of an individual affair, often determined by a company's history, most of the defense-oriented companies interviewed are thinking in terms of a 50-50 ratio.

Civilian-based companies, which can diversify in other ways, generally want a smaller proportion of Government business. Typically, Daystrom, Inc., of Murray Hill, N.J., settled on 20 per cent military as a goal. Before the current Middle East crisis, Daystrom was close to achieving the desired balance, President Thomas Roy Jones reports; 70 per cent of its business was in civilian markets. However, the company has now accepted several large new defense contracts.

Frank Pace, Jr., president of General Dynamics Corp., believes that balance should be thought of in terms of income rather than sales. GD is aiming at a 50-50 balance in *profits*, which means that the Government proportion of sales volume will be higher.

Setting the balance point

At any rate, a definite minimum for defense sales can be set for military-based companies dissatisfied with a 50-50 balance and for companies with little or no Government business. Experienced executives say it is inefficient for smaller companies to take Government contracts at all unless they amount to at least 15 per cent of sales. For larger outfits, they set the figure at 10 per cent. Below these levels, they assert, the cost of management, the necessary guard force, and security precautions (if classified work is sought), plus Government cost-accounting procedures, washes out profits. For the company primarily interested in Government sales as a means of keeping a foot in the door at the Pentagon or to share in advanced technology, this minimum military sales point may be sufficient.

For the few fortunate concerns that manufacture products that can be easily sold in both markets, no strict balance may be needed. They can shift faster and roll with the punches in either market with less discomfort.

For everyone else, however, achieving best balance is a continuing process. Once the original goal is reached—and it may take as much as the five years envisioned by IT&T—the balance should be reevaluated to see if it is right in the light of new market conditions.

Transitional headaches

Both military- and civilian-based companies, of course, have their problems when they attempt to attack each other's markets.

The defense company, for example, may find that its working capital needs have been increased. When a Government contract is progressing on schedule and according to specification, payments are usually made monthly. In addition, as President Hector R. Skifter of Airborne Instruments Laboratory points out, the Government sometimes builds factories for its contractors and lends them expensive machine tools and instruments. The defense-oriented company accustomed to such treatment may find it difficult to achieve as large a volume of civilian sales as it would like at first, and may have to branch out gradually.

In addition, design and production people who have been working on Government contracts are apt to be less cost-conscious than those who are accustomed to serving civilian markets. Especially where cost-plus-fixed-fee contracts have been in force, they have often got into the habit of putting the emphasis on performance rather than costs.

Moreover, most of those interviewed agree with B. F. Gira, president of Topp Industries, Los Angeles, that "one of the biggest transitions in going from Government business to civilian is to learn the art of merchandising." Finally, defense-oriented managers are often neither so adept in long-range planning nor so devoted to it as their counterparts in civilian-based outfits.

Learning the ropes

For civilian-based companies the main difficulty is in learning the intricacies of doing business with the Government—which is not, though it is often called so, a "single customer." Actually there are a multiplicity of buying influences and buying offices, which have different procedures and practices.

Civilian-based companies, accustomed to offering customer service, and, of course, weighting this service into price, must be prepared for the Government's insistence on paying only for the goods themselves.

Some civilian-based companies find the mores of defense business so alien that they refuse to plunge into the military market. Despite current slackened sales, they prefer, like Gardner-Denver Company of Quincy, Ill., for example, either to wait for the upturn or diversify into other civilian markets.

Acquisition: "most efficient"

Because of the obstacles, most of those interviewed think acquiring other companies is the most efficient way of balancing, mainly because executives who know their markets usually come along with the acquisitions. Harry Hirsch, who, as president of C. M. Hall Lamp Company, Detroit, is actively seeking new acquisitions, considers that experienced managers are the major asset gained by purchase of other companies. However, he believes that a company should have some familiarity with the field where it makes an acquisition, so that its own executives can fill in if the management of the bought-out company decides to leave.

Another advantage of acquisition, according to George Lallou of the Budd Corp., Philadelphia, is that the purchased company is usually making money or is soon expected to, while a newly founded division takes from five to six years to pay off.

Often acquisition is also the fastest route to a desired balance point, as the case of Litton Industries, Los Angeles, illustrates. This acquisitive

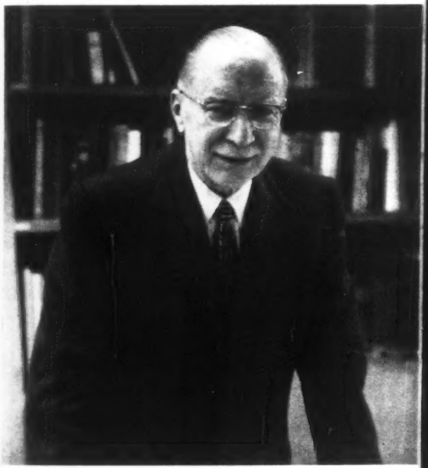
continued on page 143

Skifter of Airborne Instruments Lab.

"You need less total working capital to do business with the Government."

Brogan of Cleveland Pneumatic Drill

"You have to know your market and service it, whether it is Government or civilian."



Jones of Daystrom

"A Washington office is essential to doing Government business."

Keeping Your Workforce Ready for the Upturn

JOCELYN KNOWLES

Confident of better business in 1959, many companies are holding on to workers now and reducing costs by other means than the traditional mass layoffs.

HOW DOES a company hold on to key personnel when sales and profits are down, and wage and salary totals are higher than the current levels of business warrant? This has been a real brain-teaser for management during the past six months. Companies don't want to let out the professionals who were so hard to find, hold, and train during the boom years, and they are conscious that the supervisors and skilled workers who seem superfluous now may be hard to replace when a resurgence of business demands larger, not smaller, working forces.

Some of the things management is doing to solve this problem are revealed by a new DR&MI survey of a group of representative companies, large and small, in the East and the Midwest. Those who replied included concerns in both heavy and light industry and a number of service companies as well.

An overwhelming majority of these companies—56 out of 64—believe that the coming business upturn will not only take up the present slack in their working forces but will require some new hiring—substantial expansion in many cases. Of these, 5 per cent hoped they would be increasing their work forces to a point 25 per cent to 100 per cent above the 1957 level; 38 per cent thought they would be able to use between 10–25 per cent more labor; and 57 per cent said their personnel needs would be slightly higher next year. Of the companies who believed no expansion would be necessary, two thought business would be better but would not reach the 1957 peak.

A boom by '63?

Predictions of personnel requirements five years from now were uniformly optimistic: ten companies believe they will increase staffs anywhere from 20–50 per cent; one is convinced it will need from 60–90 per cent more personnel than in 1957; and 22 estimated an increase of anywhere from 5–20 per cent. (The others made no estimates on this.)

While a large minority of the companies were feeling no pain at all from the current recession, more than half were seriously affected. Of the latter, the majority reported that if they had cut labor costs to the extent business levels warranted, they would have laid off 10–50 per cent of their forces. Yet a few had made no cuts in personnel at all, and others had held layoffs to less than 10 per cent.

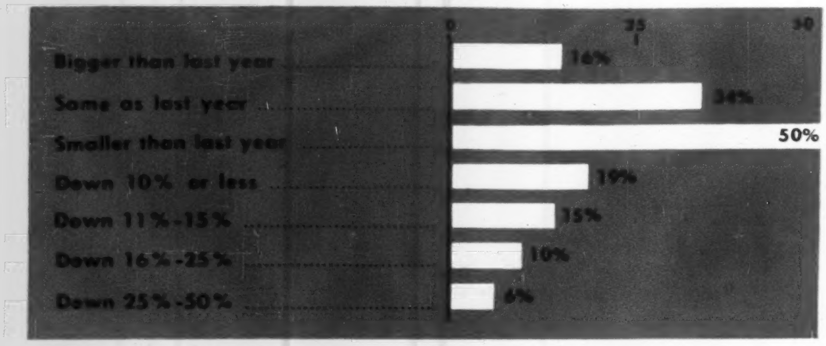
With personnel one of the biggest single items in any business budget, how are these companies making significant and necessary cost reductions without paring employment to the core?

The reduced workweek—or such variations of it as alternate-week

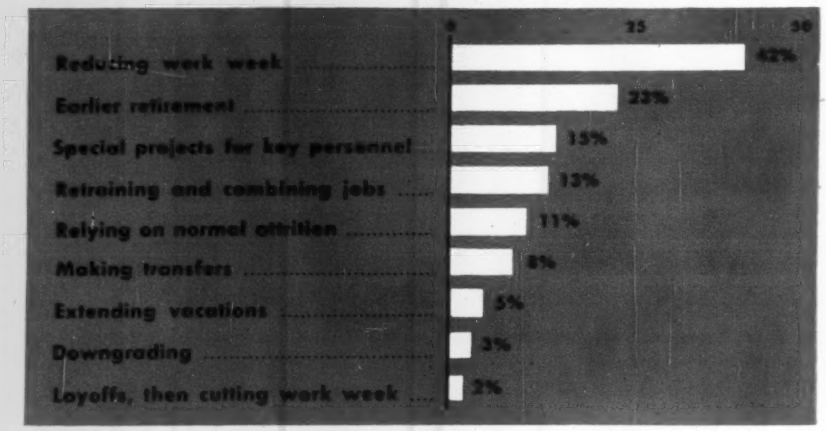
The Labor Force at Low Tide

Two key aspects of the personnel picture in companies participating in a special DR&MI survey are shown in graphic form below.

SIZE OF CURRENT WORKFORCE



WAYS OF TAKING UP EXISTING SLACK*



*Some companies use more than one method

shifts—has been the solution in many cases where the recession has hit hard. Extending vacations from two to three weeks, encouraging older workers to retire earlier, downgrading, and transferring supervisors and skilled workers to busy departments are other common practices. One company reported that it values its supervisors and skilled workers so highly that it has subsidized them in lower-paying positions, pending a sales upturn. Several others have combined jobs and retrained personnel in order to hang on to good workers.

How the latter practice can save a significant number of jobs was demonstrated at the Exide Battery Company, Philadelphia, where management won union agreement to have the guard force do some of the paperwork that was piling up on the clerical staff.

In addition, the union agreed to cooperate in a push for the early retirement of workers in the 60–65 age bracket, thereby saving approximately 200 jobs for younger and highly skilled workers. The company, in turn, agreed to pay pensions out of general funds since the retirement fund would not have borne the expense.

Incidentally, replies to the DR&MI survey were just about evenly divided on union cooperation in making staff adjustments. Of the companies that were organized, 22 reported poor to fair cooperation, and twenty said their unions were giving them good to excellent help.

Nineteen of the 34 firms that reported serious declines in sales and profits were trying to save jobs by stepping up management-labor drives to cut costs, increase production, and raise quality.

These companies seem representative of that enlightened philosophy of management which International Business Machines (as one example) adopted during the depression of the 1930's. IBM's Thomas B. Watson, Sr., attributed his company's great growth, in the face of almost universal retrenchment, to a policy of retaining key staff, moving into fresh markets, developing new products, and improving efficiency.

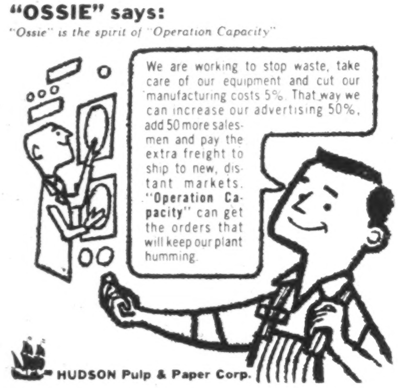
Such a policy, of course, is easier for giant corporations with diverse products and big reserves to fall back on, but it is sometimes possible for the smaller, one-product company—or even a single department—to avoid layoffs by changing methods of operation. In some companies, this is done merely on a departmental basis; in others, through company-wide or intra-plant programs.

One of the best examples of how single departments have tackled the problem independently comes from McKesson & Robbins, New Haven, Conn. When orders fell off, warehouse employees were not furloughed. Instead, slack time was used to promote same-day service by truck to remote areas, where an extra day was formerly needed for delivery. This won the company enough new customers to keep warehouse personnel at peak activity.

'Operation Capacity'

The Hudson Pulp and Paper Company, New York, on the other hand, presents the case for what a relatively

continued on page 149



"OSSIE" says:

"Ossie" is the spirit of "Operation Capacity"

We are working to stop waste, take care of our equipment and cut our manufacturing costs 5%. That way we can increase our advertising 50%, add 50 more salesmen and pay the extra freight to ship to new, distant markets. "**Operation Capacity**" can get the orders that will keep our plant humming.

HUDSON Pulp & Paper Corp.

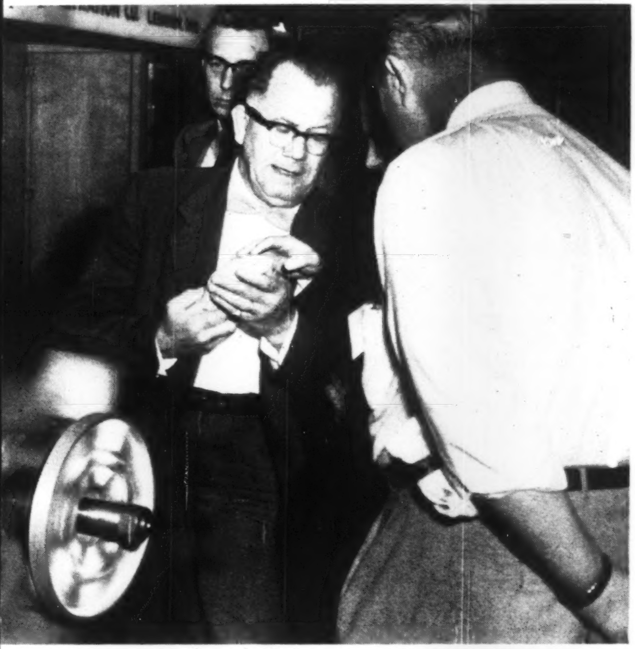
THIS AD, *run in local papers, helped publicize one company's cost-cutting campaign.*

New Marketing Twist: Company Sponsors Trade Show

New York's Governor Harriman opens show.

IN INDUSTRY, trade shows are about as common as sparrows in Spring. But a really rare bird is the trade show conceived and sponsored by one company. Such a conclave was recently held in Troy, N.Y., under the aegis of the Behr-Manning Division, Norton Company.

Behr-Manning, which manufactures abrasive belts for the metal- and woodworking industries, has discovered in recent years that its marketing problems are much more complex than merely producing a good product and tracking down the prospects for it.



WHILE THE FLAP WHEEL *whirls on, metalworking representatives examine the finish that the abrasive leaves put on a metal part.*

Only during the past decade has the use of abrasive belts come into prominence in industry. Consequently, the company has to persuade machinery producers that a market does exist for abrasive belts (as well as for traditional grinding wheels) so that they'll be willing to produce equipment to use them. In addition, the company's product engineering department develops detailed designs for such equipment and presents them to the equipment makers. And when the new machines are installed, B-M helps teach the user the new technology of using abrasive belts.

As part of the effort to sell not merely its own products but the entire process of using abrasive belts in manufacturing, the company invited the major producers of such equipment to show off their latest models in action at the industry-wide affair in Troy.

The company picked up the entire tab for the three-day affair—including advertising and direct mail to attract a selective audience who would be interested in buying both new equipment and belts. In all, 2,099 executives and supervisors from 1,584 metal- and woodworking companies in 28 states and six foreign countries trekked through the show—which, incidentally, was unique in more ways than one. Not only was it the sole one-company industry-wide trade show in the nation, but it was also the only round-up show for producers of abrasive-belt machinery, who don't attend the annual National Machine Tool Builders Association show.

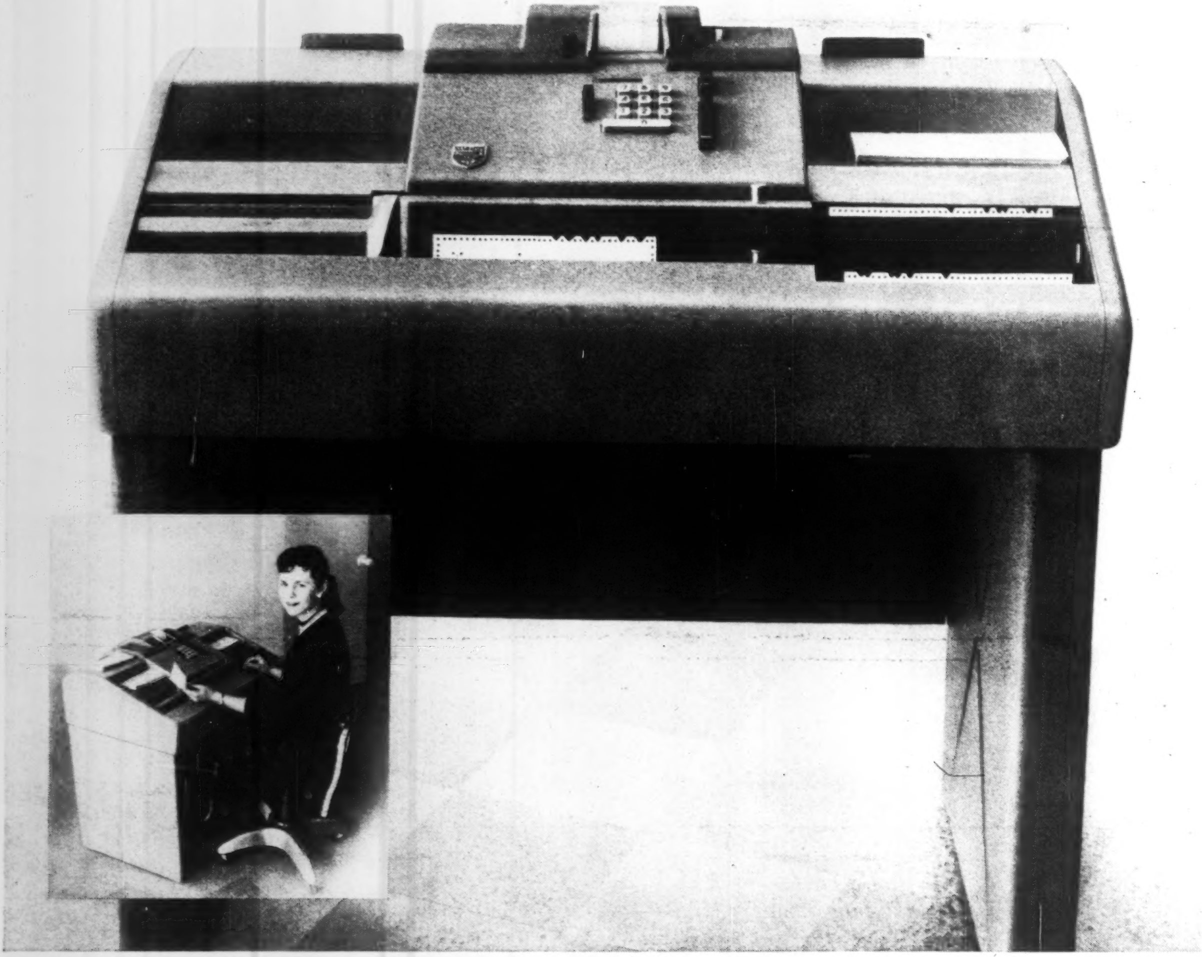
The Behr-Manning affair differed from the usual trade show in still another way: potential customers were invited to bring workpieces with them for test grinding

continued on page 121

DEMONSTRATORS LIFT *a sheet from grinder that drives a 50-inch-wide belt for mechanical scaling and/or stock removal.*

WOODWORKING DONE *by 11.5-ton sander that cuts down and finishes in one pass draws attention at Yates-American exhibit.*

Royal McBee is cutting automation down to size



NEW KEYSORT TABULATING PUNCH

- Gives you automatic punched-card processing with one low-cost machine

The Keysort Tabulating Punch today cuts automation down to size by providing, in just one compact unit, everything required for complete punched-card processing. With greatest adaptability to a company's size and procedures. And at a rental of less than $100 a month.

Keysort Tabulating Punch code-punches and tabulates quantities and amounts in Keysort cards . . . then reads, duplicates and summarizes these figures . . . simultaneously printing them for visual verification. The most versatile machine of its kind available. Easy to master, easy to use. In almost every area of plant control—job costing; labor distribution; inventory; labor, material and production control; sales and order analysis. In service organizations and hospitals—in every type of operation requiring fast, accurate data processing.

Contact your nearby Royal McBee Data Processing Representative, or write us for brochure.

OUTSTANDING FEATURES ★ Simple operation from 10-key keyboard ★ Punches 2 quantities in one operation (dollars-hours, dollars-units, etc.) ★ Simultaneously tabulates all amounts ★ Reads sorted cards, automatically accumulates and totals punched amounts ★ Prints all figures for immediate verification ★ Adaptable to any size work-load . . . to centralized and decentralized operations.

ROYAL McBEE
DATA PROCESSING DIVISION • PORT CHESTER, N.Y.
WORLD'S LARGEST MANUFACTURER OF TYPEWRITERS
AND MAKERS OF DATA PROCESSING EQUIPMENT

THE MODERN OFFICE

Industry's New Profit Frontier

A 6-Part Extra Emphasis Feature

Prepared under the direction of THOMAS KENNY

Across the nation, companies of every size are revamping their office operations—streamlining paperwork and realizing new profit opportunities overlooked before.

Today's Office—Room for Improvement........ 50
Big changes are taking place in office operations as companies plan for the rich markets ahead in the next decade.

How Much Mechanization Can You Use Profitably?.............................. 52
Here's a rule-of-thumb guide to proper office equipment for paperwork jobs of various types and sizes.

New Survey Spotlights the Office in Transition.. 54
A DR&MI survey of detailed office plans and procedures reveals far-reaching changes are now taking place.

The Office: A Better Place for Better Work.... 66
A look inside modern offices that are giving management a competitive edge in a profit-tight economy.

Getting Down to Cases........................ 99
How companies are getting better and faster information by taking advantage of the latest in equipment.

New Horizons in Manning the Office.......... 115
Modern office operations demand specialized skills. How has the clerical personnel picture changed—and what lies ahead?

For information regarding reprints of this feature section, see box on page 120

Growing stacks of paperwork are stepping up the pressure on top management to modernize office procedures.

Today's Office—Room for Improvement

The modern office is passing through a period of ferment as management explores new frontiers in profit-making.

WHEN YOU ARE BEHIND the wheel of your new $4,500 car, you are driving $2,250 worth of words along the highway, according to one expert in communications. That's a rough estimate of the paperwork and communications costs that go into the making of a modern automobile. And every snag or snarl in the information flow in industry adds to the cost of every other manufacturer's product as well.

Another authority who has thought long and hard about the problem is Professor Adrian McDonough, director of the Taylor Management Laboratory at the University of Pennsylvania's Wharton School. He says: "Half the cost of running our economy is the cost of information. No other field offers such concentrated room for improvement as does information analysis, yet it is only now that formal approaches are starting to appear."

As Professor McDonough and others point out, only in the past dozen years has the concept of *information*—as distinct from the papers, forms, and reports that convey it—really penetrated management's consciousness. That it has done so is largely due to recent break-throughs in cybernetics, information theory, operations research, and the electronic computer, all of which demanded fresh thinking by management.

In earlier years, management usually analyzed company communications in terms of simple clerical costs and paper-shuffling. To this day a sizeable segment of management still looks upon its established clerical routines as sacrosanct, and merely attempts to get better productivity out of these fixed procedures. Yet only where management has begun to think about its basic information needs, as distinguished from its current forms and procedures, is a clear analysis possible. The core of the new approach is simple: First, determine the information needs, ignoring the method by which data are transmitted. Second, tailor the paper forms, the punched cards, the

No war, no strike, no depression can so completely destroy an established business or its profits as new and better methods, equipment, and materials in the hands of an enlightened competitor.

Society for the Advancement of Management

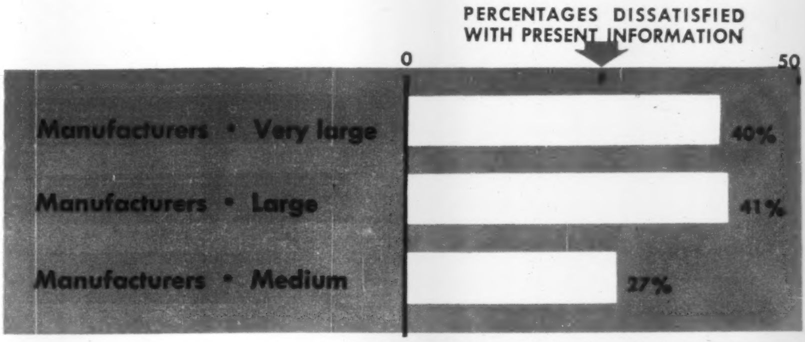
Needed: Better Data

As this chart shows, there is still a major dearth of data—both in terms of detail and timeliness—for top management decision making. Top management reports that the most serious gap in its "intelligence" concerns sales data.

Inadequate data for decision making is a problem in four of the eleven insurance companies surveyed, as against three of the six railroads, two of the seven utilities, only one of the eight large retailers, and none of the three large wholesalers.

To meet the need for more and prompter information, companies are now starting many new programs of mechanization and methods improvement.

TOP MANAGEMENT NEEDS BETTER INFORMATION ON OPERATIONS



tapes to the specific information requirements.

Says one specialist in office procedures, Bob Hinck of Wallace Clark & Company, "In the past ten years, as the result of various pressures on companies to provide better service and to diversify product lines, there has been a growing realization on the part of top executives that the office is no longer just a scorekeeping function, but has become an operations planning and customer service group."

Increasingly, companies are beginning to realize that the way they process their data should be continuously adjusted to day-to-day needs. As a result, new systems departments are daily being set up throughout industry. Alert management is coming to think of the office not only as a cost area but as a new frontier for profit. For too long, management has thought of the office as only an unavoidable overhead expense that could be cut simply by laying off clerks, using up old pencil stubs, or making the old typewriter do for another year. Streamlining systems and methods—as well as installing the latest equipment—may increase management's expenditures in the office area, but if the job is done properly, impressive cost reductions can be achieved elsewhere in business.

For instance, a medium-size manufacturer of metal parts reports that a new inventory control system has cut inventory 15 per cent and speeded up billing considerably to boot. Hefty dollar savings resulted in both areas, for the cut in stock requirements released thousands of dollars in inventory investment, while the speed-up in billing brought a solid increase in working capital.

At Republic Steel (see page 99), a new high-speed order processing system has resulted in the reduction of order-processing time by as much as 80 per cent—no small feat in an industry where quick service to customers can make or break a sale, particularly in a tough competitive period like the present.

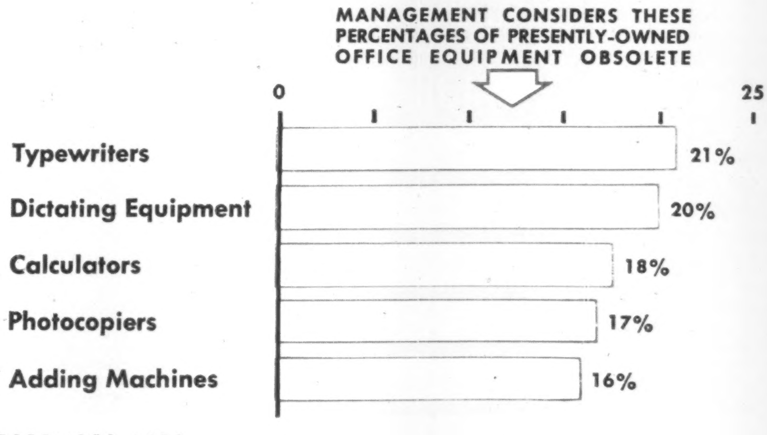
And, of course, the ability of the modern office to satisfy top management's appetite for fresher data on daily operations is a big plus value, even though companies can't usually put a price tag on it.

The importance of the paperwork information problem in industry is accented by the fact that in recent decades clerical employment has grown about five times faster than the labor force as a whole. Estimate of the current bill for clerical salaries alone now runs about $32 billion—exclusive of fringe benefits, the cost of supervisors, and the cost of providing work tools and the workplace.

The relative increase in the workforce can't by any means be attributed entirely to supposedly poor productivity of clerical help. Data on long-term

continued on page 79

IS PRESENT DAY OFFICE EQUIPMENT UP TO THE JOB?



Needed: Better Equipment

The 165 companies surveyed (see page 54 for details) reveal that much of their present-day office equipment is obsolescent —not up to the job of swiftly providing the information needed by top management in today's business climate.

About one out of every five of the companies with obsolescent equipment reports that at least 50 per cent of its typewriters should be replaced. One of four of the companies with replaceable dictating machines reports that at least half of the machines are inadequate.

But in only one of seven of companies with out-of-date calculators has the obsolescence problem reached these dimensions The same is true of adding machines.

How Much Mechanization Can You Use Profitably?

Here are the general recommendations of equipment makers for various office operations of different sizes.

TYPE OF JOB	SMALL VOLUME		
	Volume (code below)	Type of Equipment	Supplier
SALES*			
Order writing	1 to 50[1]	Calculating machines	A C D F
Invoice writing		Typewriters	B D E F
Order analysis	1 to 300[3]	Typewriters, adding machines	A B C D E F
Sales analysis		Peg boards and calculating machines	A C D E F
MANUFACTURING*			
Mfg. order writing	1 to 50[1]	Typewriters	B D E F
Mfg. order scheduling	1 to 50[1]	Typewriters and adding machines	A B C D E F
		Peg boards and calculating machines	A C D E F
Labor distribution	1 to 50[1]	Peg boards and calculating machines	A C D E F
Material distribution	1 to 50[1]	Peg boards and calculating machines	A C D E F
Payroll posting, weekly	1 to 200[2]	Posting typewriters	E F
		Payroll records posters	A C E F
Raw material Work-in-process Finished goods Suppliers — Inventory control	1 to 300[1]	Typewriters and adding machines	A B C D E F
		Peg boards and calculating machines	A C D E F
GENERAL RECORDS*			
Accounts payable posting	1 to 50[1]	Posting typewriter	C E F
Accounts receivable posting	1 to 100[1]	General records poster (general accounting boards)	A C E F
General ledger posting	1 to 50[1]		
MANAGEMENT REPORTING*			
Sales Production Profit and loss Balance sheet — Daily Weekly Monthly	1 to 50[3] 1 to 200[3] 1 to 500[3]	Adding machines, typewriters, and	A B C D E F
		comparative strip forms	A D E F

Supplier code: A, Burroughs Corp.; B, International Business Machines Corp.; C, National Cash Register Co.; D, Remington Rand Division, Sperry Rand Corp.; E, Royal McBee Corp.; F, others, including Underwood Corp., Monroe Calculating Machine Co., Friden Inc., Smith Corona-Marchant, Inc., and Comptometer Corp.

Volume code: [1]Daily transactions; [2]Number of employees; [3]Line items.

*An alternative choice is to consider a punched-card accounting system for all the operations in this group. If *sales order writing, invoice writing, and analysis* are combined and if *volume* is near the maximum, a small punched-card installation may be economical for even a *small-volume* operation. Many companies with a small volume of *manufacturing records* report that they are processing them (starting with a job ticket) economically on this kind of equipment.

The most persistent problem facing management in office operations today is the choice of the equipment best suited to particular kinds and volumes of paperwork.

While it is true that each individual situation must be considered separately, the general rules of thumb outlined in this table will provide a head start on the problem of fitting equipment to paper processing. Of course, this table is not an infallible guide. Individual requirements for varying speeds, number of copies, or data needed may call for special requirements. Not all kinds of specific equipment needed for various jobs are listed. For instance, calculators are often needed to put data into usable form for a punched-card or computer system. The table merely indicates the general kinds of equipment systems.

In using the table, be sure to relate paperwork in various departments. This gives a clearer picture of equipment needs and justifications.

MEDIUM VOLUME			LARGE VOLUME		
Volume (code below)	Type of Equipment	Supplier	Volume (code below)	Type of Equipment	Supplier
50 to 150 [1]	Typewriters and calculators Billing machines Computing electric typewriters	A B C D E F A C F B C E F	150 up [1]	Computing electric typewriters Punched-card accounting systems Data processing computers and integrated units	B C E F A B D E F A B C D E F
300 to 1500 [3]	Punched-card accounting system	A B D E F	1500 up [3]	Punched-card accounting systems Data processing computers and integrated units	A B D E F A B C D E F
50 to 150 [1]	Typewriters and duplicating machines	B D E F	150 up [1]	Typewriters and duplicating machines Punched-card accounting systems Data processing computers and integrated units	B D E F A B D E F A B C D E F
50 to 150 [1]	Punched-card accounting system	A B D E F	150 up [1]	Punched-card accounting systems Data processing computers and integrated units	A B D E F A B C D E F
50 to 150 [1]	Punched-card accounting system	A B D E F	150 up [1]	Punched-card accounting systems Data processing computers and integrated units	A B D E F A B C D E F
50 to 150 [1]	Punched-card accounting system	A B D E F	150 up [1]	Punched-card accounting systems Data processing computers and integrated units	A B D E F A B C D E F
200 to 750 [2]	General records poster Accounting machine	A C E F A C D F	750 up [2]	Accounting machines Punched-card accounting systems Data processing computers and integrated units	A C D F A B D E F A B C D E F
300 to 1500 [1]	Punched-card accounting system	A B D E F	1500 up [1]	Punched-card accounting systems Data processing computers and integrated units	A B D E F A B C D E F
50 to 150 [1] 100 to 500 [1] 50 to 150 [1]	General records poster Accounting machine	A C E F A C D F	150 up [1] 500 up [1] 150 up [1]	Accounting machines Punched-card accounting systems Data processing computers and integrated units	A C D F A B D E F A B C D E F
50 to 500 [3] 200 to 1500 [3] 500 to 3000 [3]	Accounting machines, comparative strip forms, and punched-card accounting system	A C D F A D E F A B D E F	500 up [3] 1500 up [3] 3000 up [3]	Punched-card accounting systems Data processing computers and integrated units	A B D E F A B C D E F

All the subsidiary operations involved in *medium-volume sales and manufacturing records* may be combined together on a larger punched-card installation. And if other operations in addition to *medium-volume general records* are put on punched cards and the more detailed reports produced as by-product are needed by management, then *general records* may be economically processed by this method.

A small punched-card system would include a punched-card accounting machine, key punch, and sorter, while larger installations may also add punched-card calculators, punched-card computers, and more of the basic equipment. Manufacturers stress the need for an over-all systems approach to punched-card equipment rather than its use for only one or two separate applications.

New Survey Spotlights the Office in Transition

MANAGEMENT no longer looks upon office operations merely as a burden to be endured. Instead, there is increased awareness of the profit benefits that can be achieved from a streamlined, smooth-flowing office operation.

Throughout the nation, offices are in a state of ferment as management seeks out ways to get along on straitened budgets. As a result, increased attention is being paid to office equipment that can cut manhours while getting out fresher, more complete reports.

Most of the 165 companies surveyed by DR&MI are pushing toward more mechanization in one form or another—tabulating equipment, integrated data processing equipment, electronic computers, and so on. And along with the stress on more equipment, scores of the participating companies report that to cut costs they are now setting up new programs to devise better methods and procedures in handling corporate information.

Many experts in office operations warn that although emergency crash programs may clear out temporary snags, well-conceived and well-organized continuous programs—supported by top management—bring far more lasting benefits. One-shot efforts to unsnarl paperwork and set up a "perfect" system are little better than no effort at all. For paperwork is a changing thing that very sensitively reflects shifts in the volume and nature of a business as well as the work habits of the people involved. As one expert says, "Systematic methods work is an effort to get the office job done *despite* people."

Also, to make sure that equipment is used most advantageously, companies are taking a long look at their present equipment (see equipment obsolescence chart on page 51) and are replacing equipment that cannot keep up with the tempo of today's business. Increasingly, recommendations for purchase of office equipment are being taken out of the hands of individual department heads.

Justifying the equipment

In many of the surveyed companies, management is making determined efforts to systematize and improve office operations. In about 10 per cent of the companies, no purchases of office machines or furniture are made without the approval of staff systems departments. In several of these, pilot operations of various models are set up before a decision is reached. This is particularly true of insurance companies and other firms with a large volume of paperwork.

Some companies are setting up unusual organizational arrangements to get the most for their office equipment dollar. The treasurer of a greeting card company reports, "We control office equipment purchases and expenses by the coordination of our office methods group and our overall budgeting control group."

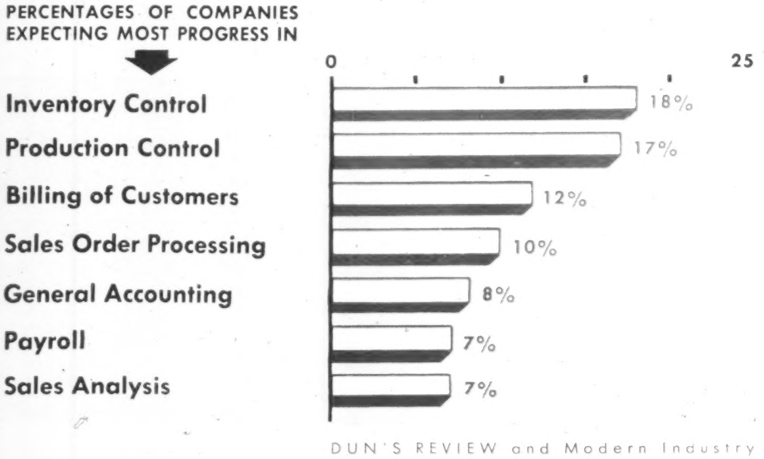
Companies are increasingly applying engineering standards to office work. The planning secretary of an insurance company says, "We have developed manuals for office work measurement, work sampling, quality control, and cost control for the better indoctrination of line managers, enabling them to take advantage of all the newer techniques for better supervision, increasing productivity and reducing office costs."

The director of systems and services in an aircraft manufacturing company points out that office functions are becoming more centralized. He says:

> Our Office Service and Procedures Department has direct responsibility for all company procedures, flow charts, forms, work simplification, office layout, office equipment, printing, stationery supplies, tabulating, reproductions, photography (including motion pictures), office machine maintenance, communications—i.e., telephone, telegraph, TWX, and mail—and all travel and other reservations. The advantage of centralized control of all these

Best Areas for Control

During the coming five years, the 165 companies participating in DR&MI's survey expect to make the most progress in mechanization or automation in the specific paperwork areas listed here. Significantly, payroll is low on the list; in many companies, this area has received the lion's share of the attention in recent years. Also, a sizable minority, who do not point to a single paperwork area for future improvement, are planning system-wide improvements that cut across several areas at once. For instance, several plan to mechanize the paperflow in order processing, inventory control, production planning, and invoicing simultaneously.



PAPERWORK OFFERING MOST ROOM FOR IMPROVEMENT IN MECHANIZATION OR AUTOMATION IN THE NEXT FIVE YEARS

Highlights of DR&MI's Survey of Office Operations

¶ **Actual figures on what companies in various industries are spending (as a percentage of sales) for processing paperwork throughout the organization.**

¶ **Details of how many companies have boosted their profits by achieving substantial savings in their office operations.**

¶ **Data on the number of non-production workers needed in various lines of industry to keep 100 workers on the production line.**

¶ **New methods recently developed by company managements to streamline information flow and provide better data for top-level decision making.**

¶ **Facts on the office work simplification programs that are spreading throughout industry and their progress to date.**

> activities is obvious, since many of the functions overlap in our various departments. Standardization is possible when all systems, equipment, forms layout, and so on are controlled by one organization.

The control of office equipment is being centralized so that equipment won't be idle or under-utilized in one department while outlying or branch offices may be purchasing equipment. Says the controller of a surgical dressings manufacturing company, "No equipment is being replaced now unless the very latest equipment available is thoroughly evaluated." New equipment has to demonstrate clearly, in dollars-and-cents terms, that it can more than pay its own way. (See page 88 for equipment evaluation form.)

More than ever companies are now insisting that the cost of new equipment must be amortized in a few years by producing operating economies, and that, in addition, the return on the investment should be up to the companies' usual rate. Of course, there are many instances where the benefits of new equipment for data handling may bring intangible results on which specific price tags cannot be placed, such as fresher information for top management decision making, or better service for customers that may strengthen a market position.

Toning up for the future

While some companies discourage replacing office equipment, many are mechanizing wherever possible and building both flexibility and possible expansion into their offices in preparation for the boom markets of the 1960's. They are using the present slack period to get into fighting trim.

Says the methods department manager of a service company:

> We have recently moved from a four-story building, where office operations evolved around the building layout, to a modern single-level building designed specifically for the flow of our office operations. Also, we have performed numerous equipment studies. As a result, during the past three years we have replaced approximately 90 per cent of our equipment. We are installing accounting machines to replace a manual operation on 90,000 accounts receivable. We are studying the possible benefits from a medium-size com-

About This Survey

This new DR&MI survey of office equipment and management practices is drawn from detailed replies to a four-page questionnaire completed by 165 corporations. Most of the replies—129—came from manufacturers. These fell into the following size groups:

Annual Sales	Percentage
$1 to $5 million	12
$5 to $10 million	12
$10 to $25 million	16
$25 to $50 million	19
$50 to $100 million	18
$100 million and over	52

In this group, the largest number—26—came from the non-electrical machinery manufacturers. Fifteen were fabricated metal products manufacturers, fifteen were chemical producers, and eleven were food processors.

The remaining respondents were eleven insurance companies, eight large retailers, seven utilities, six railroads, three wholesalers, and one service company. The retailers have sales ranging from $6 million to more than $3 billion, with most over $500 million. The three wholesalers have volumes ranging from about $25 million to $475 million.

About 42 per cent of the questionnaires were answered by top management executives, and the remainder by such middle-management personnel as controllers (15 per cent), systems and methods executives (15 per cent), and office managers (7 per cent).

In the charts on pages 56, 59, and 88, "medium-size" manufacturers are defined as those with sales ranging from $1 million to $10 million; "large" have sales ranging from $10 million up to $100 million; "very large" have sales over $100 million.

puter. Now we are expanding our procedures and standards program for office operations. And we now have a forms control and design program under way.

Since the full impact of scientific management techniques is only now beginning to be felt in the office, there is much ground for substantial savings in operating costs on this new profit frontier. For details of the savings scored by the companies participating in the DR&MI survey, see the table on page 88.

Simplify your procedures

Economies are being achieved by discovering the particular data handling method best suited to a specific situation. In large, growing companies this usually, but not inevitably, involves some form of mechanization. Sometimes savings are effected by work-simplification programs, including work measurement, standards, workflow charting, and the like. Systems men point out that the smoothest possible mechanization can't improve on an unnecessary procedure. In a word, before asking *how*, management shouldn't fail to ask *why*.

But when a paper-handling system has been streamlined down to its essential elements, further advances can frequently be achieved through mechanization. A silverware manufacturing company reports a current saving of $30,000 through stepping up the mechanization of two operations by putting them on tabulating equipment. Accounts receivable had been on bookkeeping machines, while stores accounting moved up from visible records.

A retail chain is currently chalking up a saving of $250,000 by substituting calculators for hand figuring. A steel company reports that a rearrangement of office layout and the addition of acoustical treatment also brought savings. Most of the surveyed companies noted that their savings resulted from a combination of measures. A food manufacturing company racked up $100,000 by centralizing branch accounting, installing work measurement controls, and converting some manual operations to punched cards.

Others relied entirely on changes in methods to effect economies. For instance, a manufacturer of steel buildings added $10,000 to profits by reducing the number of reports produced and eliminating duplicate work.

However, despite the many economies that companies are scoring with new office equipment, almost half the surveyed companies express dissatisfaction with present-day machines. The most frequent complaints concern equipment reliability and service.

Many contend that machine breakdowns are much more frequent now than in years past. At the same time, office management is asking for more automatic equipment for specialized tasks. Others complain of high-cost service contracts and delays in servicing equipment—but most of these complaints, as might be expected, come from companies in outlying areas.

A number of the surveyed companies say that equipment is too com-

Work Simplification: Who's in Charge?

The responsibility for work simplification is in many hands. Such programs usually include forms-control, clerical motion study, and workflow analysis.

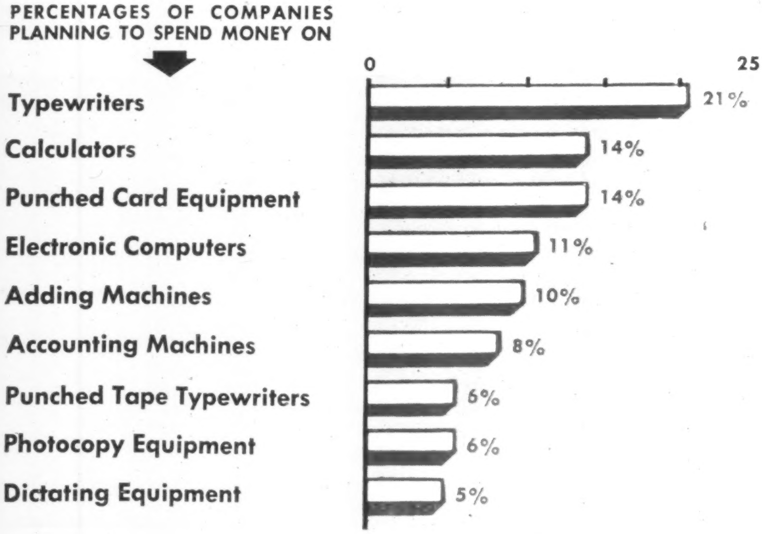
	Consultant	Staff analyst	Office manager	Controller	Supplier	Special committee	Other
Manufacturers, very large . . .	0	39	11	2	0	1	0
Manufacturers, large	3	34	20	4	1	1	4
Manufacturers, medium-size .	3	2	18	0	1	0	2
Insurance companies	1	8	2	0	0	0	1
Retailers.	0	4	6	0	0	0	0
Utilities.	0	2	1	0	0	1	1
Railroads	0	6	2	1	1	1	1
Total	*7*	*91*	*58*	*7*	*3*	*4*	*9*

In some companies, responsibility rests on more than one person; thus, totals exceed number of respondents.

The Needed Hardware

Among the 165 respondent companies, typewriters are slated for the largest share of planned spending for new office equipment in the coming year. As an indication of the progress of office automation, 31 per cent of the companies are planning to make their largest office equipment investments for punched-card equipment, electronic computers, and punched-tape typewriters. Such spending is chiefly planned by large manufacturers and insurance companies. Several of the participating companies plan to devote their largest spending to office furniture and files. Such relatively new equipment as photocopy machines will be first on the spending list of 6 per cent of the surveyed companies.

WHAT MANAGEMENT PLANS TO BUY TO IMPROVE THE OFFICE



Office for a successful man

You can tell immediately the kind of man he is. He's a leader. He's reached the top of his profession. His capabilities, his position and his personal tastes are all reflected perfectly by his office. He chose a Steelcase office. And he specified Steelcase for his general office and for all other offices in his organization. You see here the styling, the engineering and the construction that have made Steelcase the world's leading manufacturer of fine steel office furniture. When you are ready to furnish your own office — general or private — join the growing list of important companies who specify Steelcase. The cost is surprisingly modest. Steelcase Inc., Grand Rapids, Michigan. In Canada: Canadian Steelcase Co., Ltd. Don Mills, Ontario.

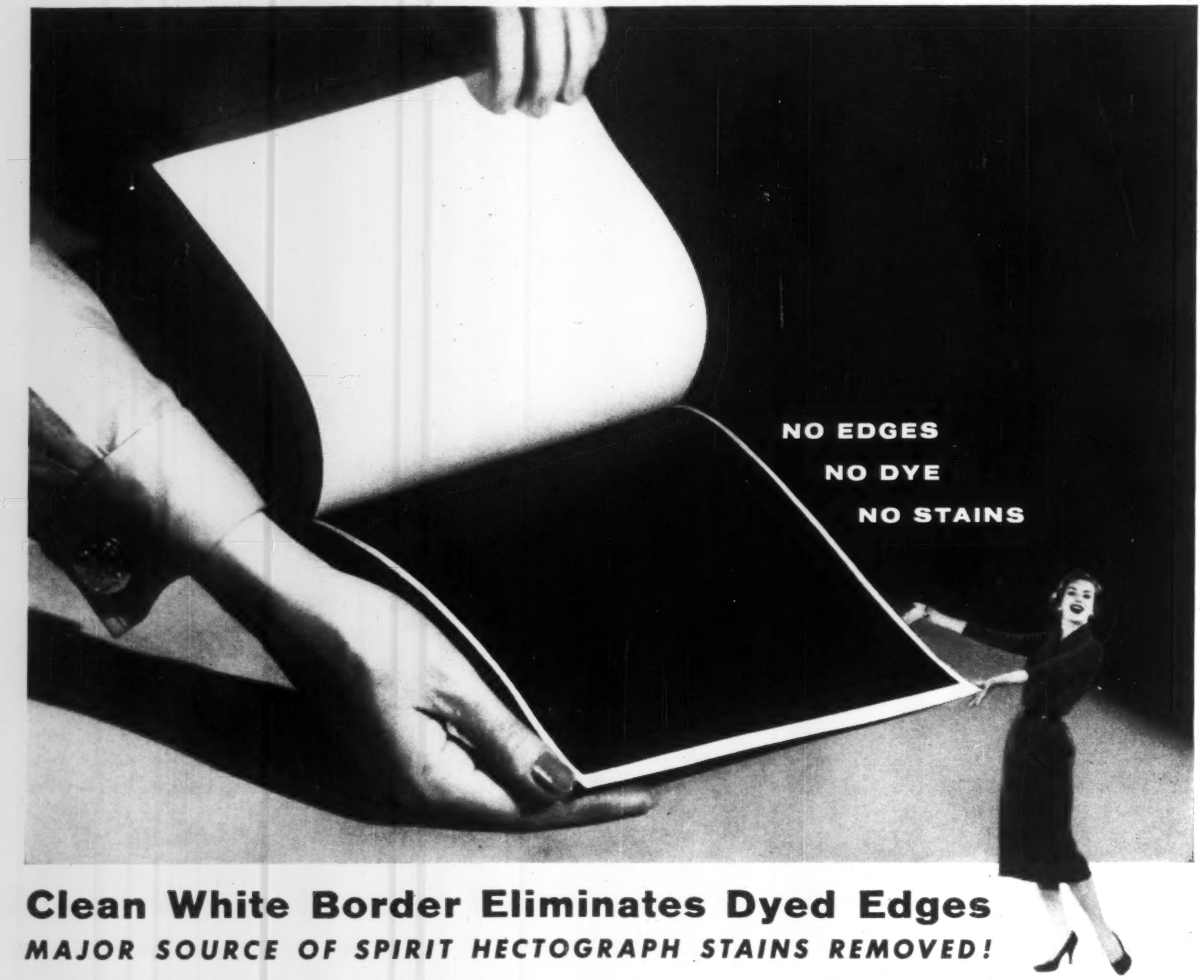
This is a section of Inland Steel Company's new general office.

desks

With Our Compliments: A copy of our new full-color Desk Catalog for the asking. Have your secretary address Dept D.

STEELCASE INC

NEW CLASSIC READY-MASTER



Clean White Border Eliminates Dyed Edges

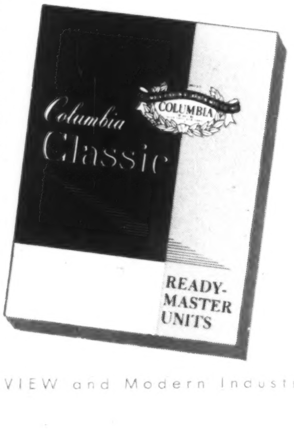
MAJOR SOURCE OF SPIRIT HECTOGRAPH STAINS REMOVED!

Dyed edges of the master—long the biggest source of stains, smears and annoyance in spirit duplicating—have been eliminated by Columbia's new Classic Ready-Master Unit.

The hectograph coating of the new Classic Ready-Master is sealed off short of the edges—leaving a clean, *dye-free* border to handle. *There's no dye to rub off, stain and travel from typewriter to duplicator to files, either.* Everybody and everything connected with your spirit duplicating stays cleaner with new Classic Ready-Master Units!

The new Classic Ready-Master Unit incorporates these *additional* features: Tru-Guide Indicia, Tempflo Supercoating and Folded Construction . . . *additional* guarantees of long, brilliant runs and re-runs!

FREE SAMPLE—See for yourself the new cleanliness new Classic Ready-Masters will bring to your spirit duplicating. For free sample write, using company letterhead: Columbia Ribbon & Carbon Mfg. Co., Inc., 819 Herb Hill Road, Glen Cove, N.Y.



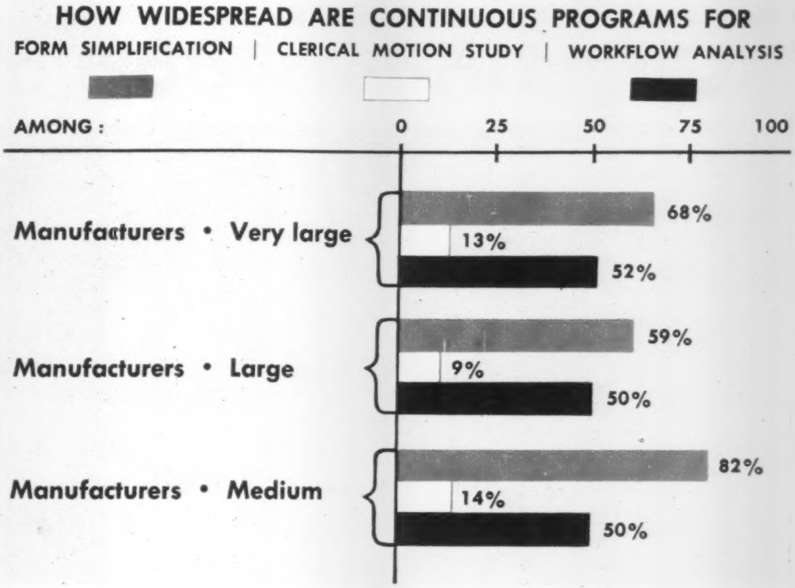
CLASSIC READY-MASTER BY Columbia

COLUMBIA RIBBON AND CARBON MFG. CO., INC., GLEN COVE, NEW YORK
COLUMBIA RIBBON AND CARBON PACIFIC, INC., DUARTE, CALIFORNIA

Working for Control

Every one of the surveyed retailers, wholesalers, and railroads, all but one of the utilities, and all but two of the insurance companies reported that they had operating programs for forms simplification. However, clerical motion study was much less common. Nevertheless, it was more frequently encountered among these lines than among manufacturers. For instance, two of the six railroads have such programs. Two of the three wholesalers, four of the eight retailers, four of the six railroads, and five of the eleven insurance companies reported continuous programs for workflow analysis.

Among the companies that have programs for workflow analysis, very few have charted all or the major part of their office operations. Among very large manufacturers, the percentage of the charted operations ranges from 5 to 90 per cent, with the mean average at 30 per cent. Large manufacturers have charted from 5 to 95 per cent, with an average of 39 per cent. Medium-size manufacturers charted from 25 to 100 per cent, averaging 59 per cent. Average percentages were: railroads, 49; insurance companies, 42; retailers, 39.



plex for today's office workers. Companies also expressed dissatisfaction with delivery schedules on new equipment, the noncompatibility of various equipment (e.g., five-channel paper tape for Teletype transmission and eight-channel tape for IDP office equipment), and with alleged poor flexibility of some equipment. This last may well be the result of equipment makers' efforts to fill their customers' specific needs in specialized data handling. Finally, some respondents complain that too much of the available equipment is designed for large business rather than for smaller companies.

Hard-sell headaches

The disenchantment of some companies with their equipment may well reflect overselling on the part of equipment salesmen eager to bag a prospect in a tight market. Several of the surveyed companies complain that office equipment salesmen oversell the capabilities of their machines and cannot really be relied on for guidance in setting up office systems. Says the assistant to a retail chain company vice president, "Manufacturers don't have any one man who knows the complete picture—invariably the representative knows only one or two machines and very little beyond that." Others, too, lament the scanty technical knowledge of salesmen—even in their own particular specialty.

Some companies feel that their biggest problem is how to determine which piece of office equipment is the best when several manufacturers offer the same basic types—particularly when they feel the reps are not completely reliable as to the equipment's potential.

But others of the surveyed companies confess that their problems are of their own making. For instance, an executive of an insurance company admits, "Our problems are lack of standardization, especially in furniture, files, and chairs, brought on by our own poor purchasing and by the absorption of other companies." But despite the smattering of complaints, most of the companies are well satisfied with today's office equipment and the advantages it offers alert management.

What needs to be done?

To get control of the cost of office operations, management must first determine the nature of the problem. Increasingly, companies are coming to think of office costs as the expenses involved in processing paperwork throughout the company, not merely in traditional office areas. About 60 per cent of the surveyed manufacturers were able to come up with estimates of total paper-processing costs in relation to sales (see table on page 63).

About half of these reported that the percentage has increased in the past three years. One-third said that the percentage had dipped, while the remainder reported no change. Some companies have been keeping detailed figures on total paperwork costs for several years.

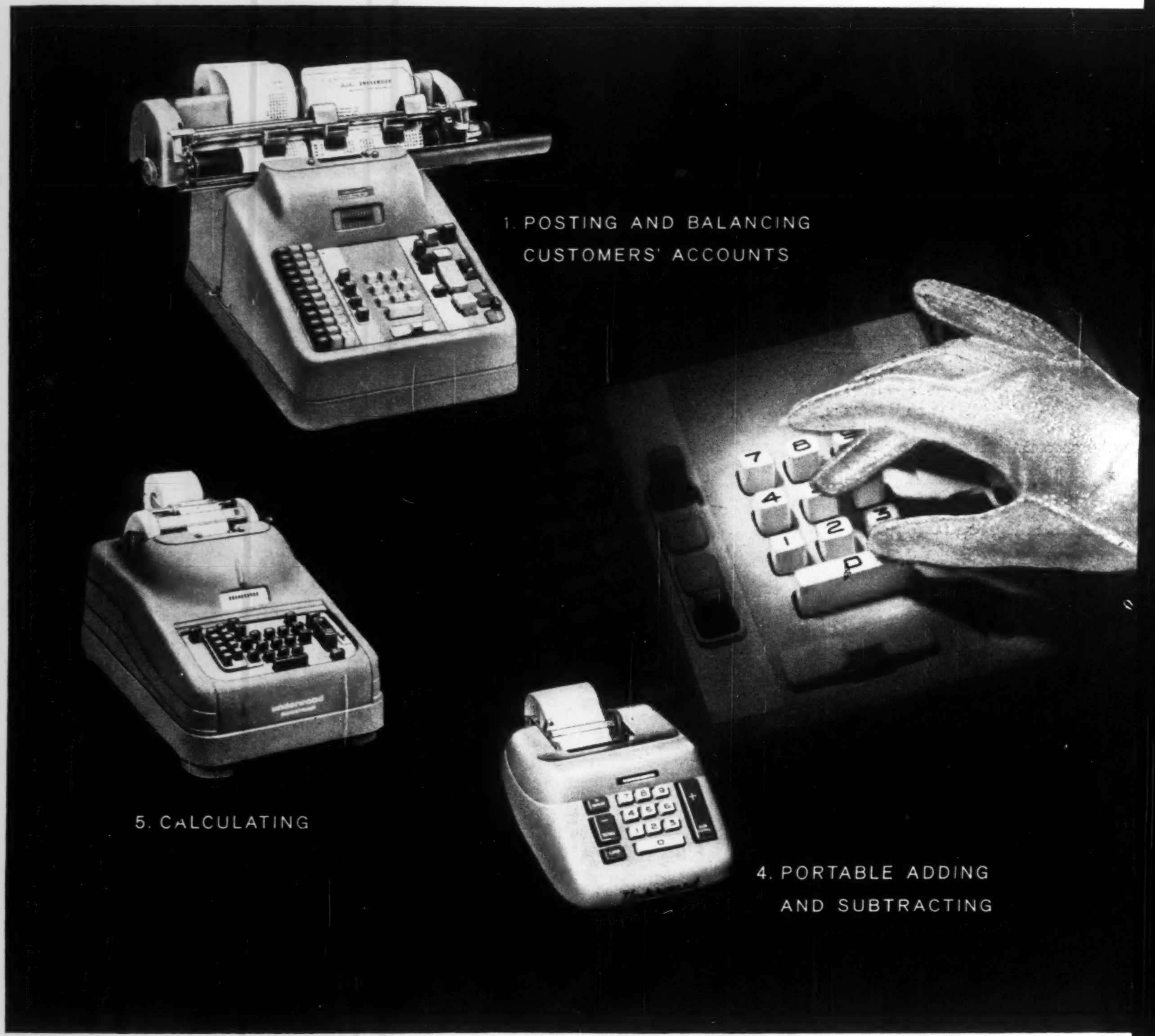
Of course, the ratio of paperwork costs to sales volume depends on many factors within particular industries—product mix, completeness of reports demanded by management, methods of distribution, and so on.

Why costs climb

Those reporting recent increases in paperwork costs trace them to wage hikes for white-collar workers, rising equipment cost, and sales volume decreases. And, since companies are generally less prone to lay off office workers than factory help when volume shrinks, this too can send the percentage upward, calling for more strenuous management efforts to get office costs under control.

Through the use of better equipment, and sometimes by combining office tasks, more than a score of the reporting companies said they have been able to cut down their office force in recent months. Most of the attrition is due to retired or departed workers who are not replaced, but in some outfits office layoffs have brought both savings and improved productivity. The treasurer of a leather company says that his company

Only **underwood** brings 10-key


1. POSTING AND BALANCING CUSTOMERS' ACCOUNTS
5. CALCULATING
4. PORTABLE ADDING AND SUBTRACTING

Simple 10-Key* underwood *Master-Touch . . . Fast, Easy, Accurate

***Fast** because just 10 keys handle all figuring!*

***Easy** because there's no need to watch the keys!*

***Accurate** because you can enter figures as you read them!*

underwood MASTERS YOUR PAPERWORK*

simplicity to every figuring job!

underwood 10-key
Master-Touch*

2. ADDING AND
SUBTRACTING

"like wearing magic gloves!"

3. GENERAL ACCOUNTING

To call
underwood
consult the
Yellow Pages

1. Low priced POST-MASTER* saves *all the time* you spend footing and balancing customers' accounts, locating and correcting trial balance errors, putting the detail on and balancing statements. It posts, balances and proves ledger and statements in a single line entry. Fast and error-free. *Easy terms available.*

2. Famous UNDERWOOD SUNDSTRAND 10-Key Adding-Subtracting Machine. Complete figuring unit – adds, subtracts, multiplies. *All models handle forms as well as tape* for simultaneous figuring and record-keeping.

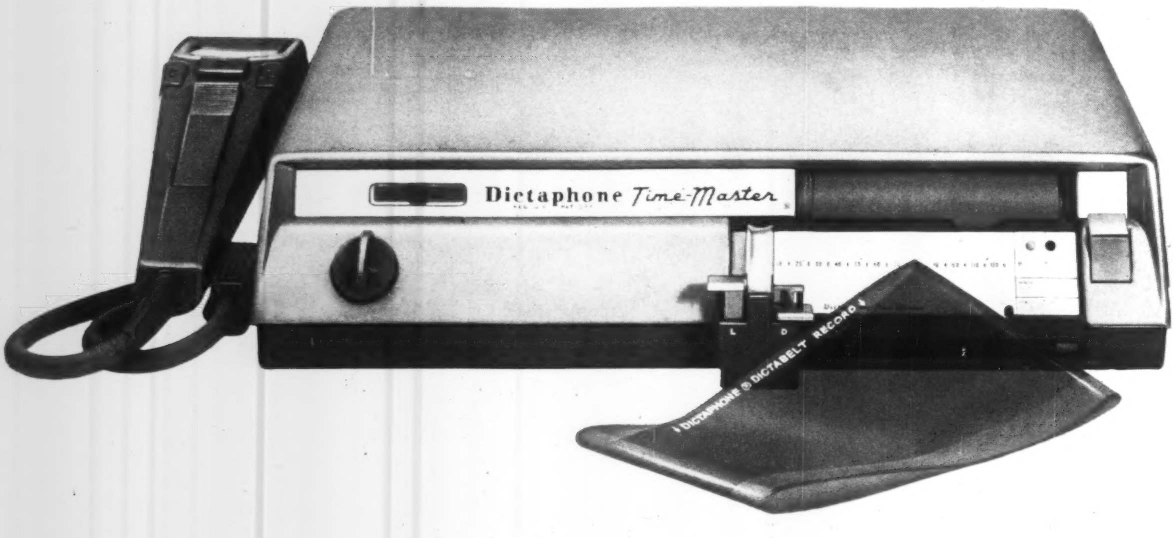
3. Multi-total GENERAL ACCOUNTING MACHINE for any job requiring multiple totals and balances. Can be programmed for payrolls, accounts receivable, accounts payable, statistical records and reports, budgetary records, etc. *Offers many automatic features.*

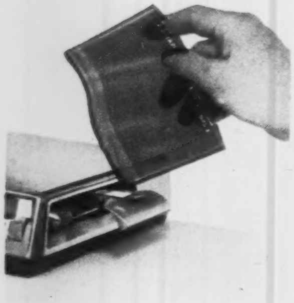
4. Just 7½ lbs., the new ADD-MATE* is the *only phone-size, all-electric adding-subtracting machine.* Ideal for store, home or office – adds, subtracts, multiplies, totals, sub-totals. Big-machine results for only $168.50 plus tax. *Carrying case optional.*

5. New PRINTING CALCULATOR combines the 10-key simplicity of Underwood Sundstrand adding-subtracting with *touch multiplication, automatic division and constant feature* for easy handling of all business figures.

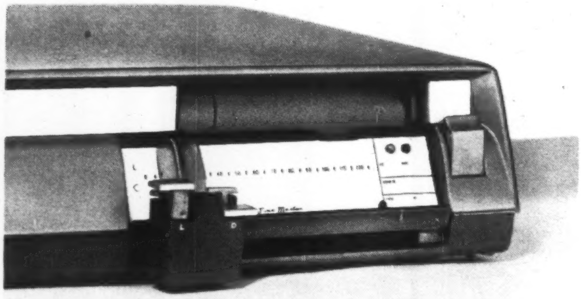
* An Underwood trade-mark

Read how effortless dictation becomes...with the automatic dictating machine





DICTAPHONE

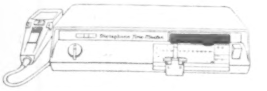


Here's how you operate the new Dictaphone TIME-MASTER: you start by snapping in its remarkable Dictabelt record. This record can *not* be erased by accident—it's the simplest, most economical dictation record made.

. . . now pick up mike. That turns machine on. Start talking. No wait for warm-up—thanks to transistors. And all your dictation controls are touchbuttons *right on the mike*. Result: you save time—and that's *money*.

Easy so far? It gets even easier. The Dictabelt record does all its recording *visibly*. You always know where you are, need no blind reelwinding to spot a part you want played back. Mistakes are marked under *exact* groove here on this slip—it's as easy for the secretary as it is for the boss!

And that's only the beginning. Call your local Dictaphone office for a demonstration of this most timesaving, profit-making method of business communication known.

ALL NEW DICTAPHONE  **TIME-MASTER**

MORE THAN A DICTATING MACHINE—A MONEYSAVING INVESTMENT

Dictaphone Corporation, 420 Lexington Ave., N. Y. 17, N. Y. • Service you can depend on the world around. In Canada, write Dictaphone Corporation, Ltd., 204 Eglinton Ave. East, Toronto . . . in England, Dictaphone Co. Ltd., 17-19 Stratford Place, London W.1. Dictaphone, Time-Master and Dictabelt are registered trademarks of Dictaphone Corp.

has cut office costs noticeably by "dropping junior personnel and asking for 120 per cent performance from the rest of the office force." Since about 85 per cent of the cost of running an office is labor cost, any new machines or methods that can bring improvements in productivity will be reflected in the profit picture.

Clerical help wanted

Despite the recession, most of the surveyed companies report that at mid-year they were still affected by the clerical worker shortage. About one-fourth of the companies still find stenographers in short supply. One-fifth have trouble getting tabulating equipment operators and good secretaries. Others report shortages of computer programmers, dictating machine operators, and calculating machine operators. But about 20 per cent of the respondents are experiencing no shortages whatever.

In general, companies in manufacturing centers are having the least trouble, while those in such large "office" cities as New York, Chicago, and Philadelphia are having the most difficulty.

The dearth of skilled office workers and the accompanying high wage scales are reflected in the widespread efforts that companies are now making to mechanize their office operations as fully as possible. But despite the progress being made, almost all respondents point to specific practices causing serious waste in office operations.

Three cost raisers

The reasons for the slack conditions in many offices are as various as human failings. Results of the DR&MI survey indicate that the three most common sources of waste and inefficiency in office operations are (1) poor supervision, (2) too many reports, and (3) duplication of clerical routines.

- Management in many companies thinks that inadequate supervision is the root of the problem. Others trace supervision difficulties to the "changed attitude" of many clerical workers. Says the assistant controller of a metals fabricating company, "There is a lack of recognition by a large percentage of the younger clerical personnel that even though their relative indifference doesn't mean the loss of their jobs, it acts as a deterrent to their promotion possibilities and also results in everyone getting less for his money."
- Companies frequently attribute the flood of reports to traditional reluctance to change a practice once it has begun, and to management's insistence on getting information even if it doesn't contribute to the profit picture of the company. They point to the proliferation of reports in the absence of tight over-all control, so that similar reports may be prepared in various departments.
- The duplication of clerical routines is due to the frequent overlap of departmental duties. Companies seldom achieve true coordination of office routines, since top management still generally thinks of office operations in compartmentalized terms.

Here are some frank, off-the-record management comments on what's

What Office Operations Cost as a Percentage of Sales

More than half the surveyed companies know just what their total costs of office operations are at the present time. Expressed as a percentage of sales volume, office operating costs are here defined as including all office and clerical costs except executive salaries—that is, the cost of processing paperwork in all company departments. For a manufacturer, the level of paperwork depends on many factors—whether distribution is handled by the company, by wholesalers, or by agents; the extent of services provided to customers; the particular product mix; "make or buy" policy on assembled parts, to name a few. Italic figures are average percentages; others are individual company percentages.

INDUSTRY	Sales Volume in $ Million					
	$1–5	$5–10	$10–25	$25–50	$50–100	Over $100
Food and kindred products	5	1.1		2		*3*
Textile mill products		*6*			*2*	*2*
Apparel and related products			*3*			
Furniture and fixtures	16.7					
Pulp, paper, and products	10	2.25		*12*	2	
Printing and publishing			1	*12*		
Chemicals and products	22.7		*4*	1.5	*5*	*4*
Rubber products					3.6	
Leather and leather goods		6.5		3.6		
Stone, clay, and glass products		*11*				5
Primary metal industries				2		*4*
Fabricated metal products	5	6.3	5	*4*	7.8	2
Machinery, non-electrical	1.2	2	*4*	*8*	*10*	7
Machinery, electrical				8		3.3
Transportation equipment	.04	5.4				30
Instruments and related products						3
Miscellaneous manufactures		11.3	4.2	4	30	

wrong with office management today:

- *The lack of consideration for the "means" (office operations) because of preoccupation with the "ends" (reports and records)*—Office manager, watch company.
- *Office management lacks initiative to review their records and reports regularly and ask themselves, "Why do we do it?" Top management should determine what figures they really need and not depend on sheer quantity of reports and statistics to disclose somehow the operating figures needed*—Vice president, food company.
- *Management people spend too much time accumulating records that they feel may be needed for self-justification years later*—Assistant treasurer, ceramic tile company.
- *People look for a routine to follow instead of trying to improve the system and perform their duties in less time and with greater efficiency*—Treasurer, metals company.
- *There's a lack of communication between those preparing and those receiving information*—Vice president, foundry company.
- *Unauthorized details and exceptions to established systems are allowed to creep in and snarl operations*—Controller, luggage company.
- *The most irritating source of waste and inefficiency in office operations is the inclination of office personnel to assure themselves of a complete and absolutely correct answer by means of elaborately detailed records and systems of double-checking, without regard to the ultimate use of the information*—Administrative assistant to the president, chemical company.
- *Unrecognized duplications of effort among several related departments are now being revealed by our current flow charting of complete cycles*—Controller, rubber company.
- *The frequent realignment of previously prepared information to fit the different preferences of presentation because of unwillingness of functional heads to accept standard forms*—Vice president, foundry company.

Better data needed

As the chart on page 51 shows, a sizable percentage of the top executives feel that they need better information on operations. Most of the unfilled needs concern special kinds of information or the speed with which top management receives its information.

Most frequently mentioned by top management is its need for more sales data. Not only would top management like fresher information on what is happening in the marketplace, but it wants more refined information as well—on such things as sales volume, costs, and profits on individual products by territories.

Almost as common is the desire for better information on production—particularly the costs of individual products at various volume levels. A smaller number—about half as many companies—indicate that their top management would like to have better information on inventories.

In several of the surveyed companies, however, top executives say that they already have too much information—a not uncommon plaint in industry. To remedy the situation, companies are setting up programs to increase the selectivity of top management reports—reports that signal areas needing attention rather than voluminous, detailed reports.

For example, a transportation

continued on page 87

How Many Non-Production Workers for Every 100 on the Line?

In recent years, the impact of automation in the plant and the rise in the paperwork load have been reflected in a rise in the ratio of non-production workers to production workers. Italic figures show average ratios in 85 surveyed companies; other figures are individual company ratios.

For instance, one medium-size food manufacturer has eight non-production workers for every 100 production employees. While clerical workers comprise the overwhelming majority of non-production workers, this group also includes supervisors, professionals, and sales and administration personnel.

INDUSTRY	Sales Volume in $ Million					
	$1–5	$5–10	$10–25	$25–50	$50–100	Over $100
Food and kindred products	8			*65*		*28*
Textile mill products		*22*		*16*		*65*
Apparel and related products			*23*			
Furniture and fixtures	*19*	30	30			
Pulp, paper, and products	*14*			20, 29, 55	27	*27*
Chemicals and products	50		50	25	*38*	*35*
Rubber products					24	
Leather and leather goods		23		17		
Stone, clay, and glass products		30				20
Primary metal industries				30		*30*
Fabricated metal products	*46*		*35*	*40*	*22*	
Machinery, non-electrical	20		*30*	*40*	*44*	*44*
Machinery, electrical				78		*21*
Transportation equipment	38	72	15	34		*41*
Instruments and related products						*30*
Miscellaneous manufactures		34	*38*	40		

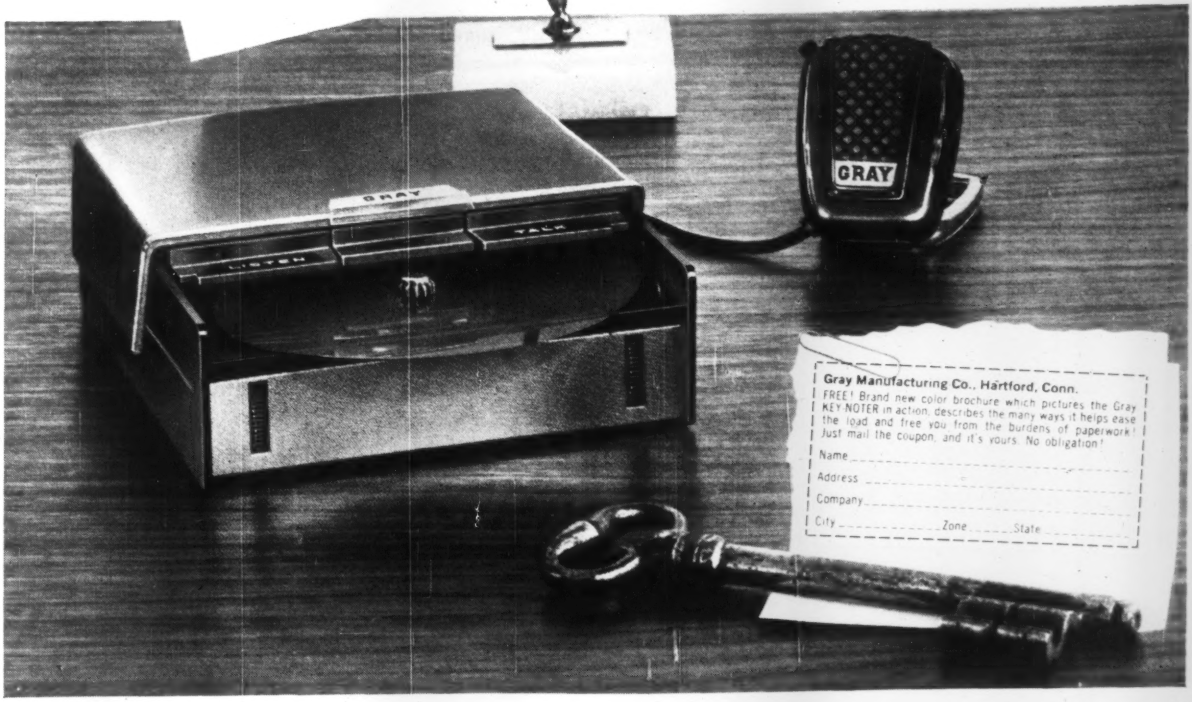
FINALLY!

The dictating machine for people who don't like machines!

THE NEW "KEY-NOTER" GRAY AUDOGRAPH

Finally they made one for me...the smallest, lightest, easiest-to-use, most advanced design, disc dictating instrument ever! No tapes, belts, buzzers or warm-ups! I just press one key and talk my work away! Believe me, it puts new pleasure into dictation! The KEY-NOTER is fully transistorized, weighs just 5 5/8 pounds, goes everywhere I go, records everything from a note to a novel! And it also doubles as a transcriber! I'd be Thanks to Gray for the new KEY-NOTER. I'd be working twice as hard without it!

P.S. The KEY-NOTER cost me just **$259.50**



Gray Manufacturing Co., Hartford, Conn.

FREE! Brand new color brochure which pictures the Gray KEY-NOTER in action, describes the many ways it helps ease the load and free you from the burdens of paperwork! Just mail the coupon, and it's yours. No obligation!

Name ____________________
Address ____________________
Company ____________________
City ____________ Zone ______ State ____________

Greater flexibility is being built into

THE OFFICE: A Better Place for Better Work

Like the American home, the office is becoming more casual, more comfortable, more convenient—and more efficient.

WHILE SCIENCE works toward the conquest of outer space, resourceful and efficient management is making strides toward the better use of inner space—the American office.

Flexibility has become the foremost objective in recent office planning—a built-in flexibility that makes it possible to design the layout around the workflow and effect rearrangements easily if growth or changes in operations demand them.

And, going beyond this purely functional thinking, management is discovering that the attractive, correctly lighted, comfortably air conditioned office does more than make workers contented—it increases productivity. According to General Electric, for instance, workers in a Washington, D.C., Internal Revenue Department office were able to process 5.5 per cent more punched cards after walls, ceilings, and machines were finished in lighter colors and a fluorescent lighting system was installed. Output rose by this percentage despite changes in the work that made it more complicated and difficult. If the job had remained the same, production would have shown a rise of nearly 20 per cent.

Similarly, Cliff Boyce of Steelcase, Inc., which has just completed a new office building, told DR&MI: "The upgrading of the environment has helped to upgrade the efficiency and productivity of our people. And we know that this has also increased morale amazingly."

Increasingly, also, office arrangement and decor are being planned to gain prestige among customers and others on whom continuing success depends. A smooth-running, well-styled office implies an efficient, up-to-date, and well-run company. In fact, many executives believe the appearance of the office is an important part of the whole package that adds up to the corporate image—the impression the company makes on its various publics.

As the evidence accumulates that it pays—in lower costs, higher productivity, and more good will outside the office and pride within it—advocates of better office layout, lighting, air conditioning, and decor are seeing more of their recommendations put into effect.

Plans for 1959

Although the recession has meant a decline in capital investment, many companies are planning to improve

FIFTY YEARS AGO, *the American office was dark, crowded, somber, its layout and decor improvised to use space hit-or-miss.*

TODAY, *the office may have an outside view as part of its decor, as does Square D Company's new suburban Milwaukee plant.*

DIRECTOR
Apeco Auto-Stat

LOWEST PRICE EVER

for an APECO COPYMAKER

Look-Alike Copy and Original

Priced to make a copier for every branch and department practical!

Priced within the budget of even a one-man office!

Less than **$1.75** *per week*

can put a new Apeco Director Auto-Stat in your office with Apeco's new lease or Installment Purchase Plan.

THE BRAND NEW

APECO DIRECTOR™ AUTO-STAT

With "SPEED-FEED" for faster, easier, copying of anything written, printed, typed, drawn, or photographed. Here's the copier for budget-minded firms. It is all-electric and precision engineered to give you clear, bright, sharp black-on-white copies of any original, any color, any paper. Foolproof, easy operation. Handsome modern styling. Send for new free book today.

American Photocopy Equipment Co.
2100 W. Dempster Street, Evanston, Ill.

SEND FOR NEW FREE BOOK

Mail This Postage-Paid Reply Card Today

American Photocopy Equipment Co. DR98D
2100 W. Dempster Street
Evanston, Ill.

Rush me without obligation your new free book on the new low cost Apeco Director Auto-Stat.

Company ____________________

Address ____________________

City __________ Zone ______ State ______

Individual ____________________

Title ____________________

Type of Business ____________________

In Canada: APECO OF CANADA, LTD., 134 Park Lawn Rd., Toronto 14, Ont.
In Mexico: APECO DE MEXICO, S.A., Ignacio Esteva, 7, Tacubaya 18, Mexico, D. F.

new, biggest value office copier...

Copies Anything
IN SECONDS

Features in no other Copier even at twice the price.

- **"SPEED-FEED"**: puts ready-to-use copies in your hands in seconds.
- **COPY SELECTOR DIAL**: gives perfect copies every time as easy as tuning in your favorite TV show.
- **SMARTLY STYLED** by Charles E. Jones and Associates, famous industrial design studio.

APECO
DIRECTOR
AUTO-STAT
Apeco Auto-Stat
INVOICES
DRAWINGS
STATEMENTS
LETTERS
RECEIPTS

COPY ANYTHING AUTOMATICALLY

New FREE BOOK tells how . . .

This new free booklet is packed with pictures and details about this sensational new low cost copymaker. Illustrates the hundreds of ways the Apeco Director Auto-Stat can work for you and save money for your business.

Printed in U. S. A.

Send for your free book today! No obligation.

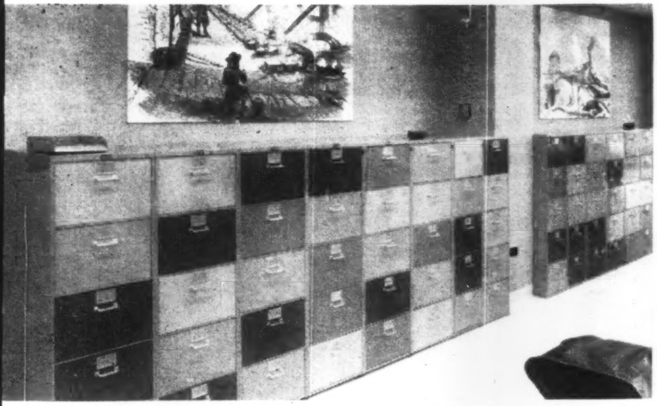
FIRST CLASS
PERMIT NO. 226
EVANSTON, ILL.

BUSINESS REPLY CARD

No postage stamp necessary if mailed in the United States

5c postage will be paid by—

AMERICAN PHOTOCOPY EQUIPMENT CO.
2100 West Dempster Street
Evanston, Illinois



VARIED COLORS—*brown, green, and orange—liven up the gray-beige file cases in the Morton Salt Company's new offices.*

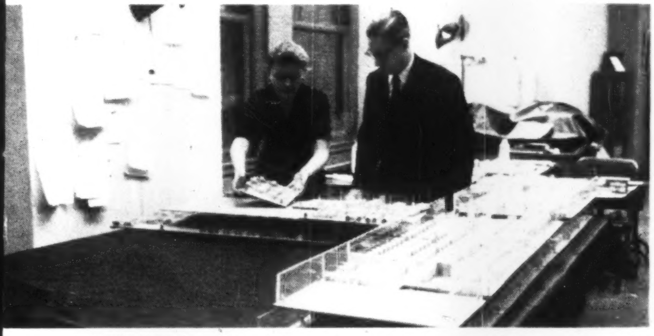
COLORED ALUMINUM *desks by General Fireproofing are used in Reynolds Metals building, as shown in office of VP W.H. Wells.*

their offices over the next twelve months, a DR&MI survey shows. A cross-section of industrial companies (three-fourths of the sample) and nonindustrial companies, including wholesalers, retailers, utilities, insurance companies, transportation companies, and others, was asked what improvements in office environment they planned for the coming year. Of the 165 companies responding, 20 per cent plan to install better lighting; 19 per cent, to improve decor; 17 per cent, to put in air conditioning; and 14 per cent, to make acoustical improvements. Fifteen per cent plan some remodeling or layout changes, or specific improvements, such as repainting, new furniture, or the installation of background music (see chart on page 90). One-fourth reported that they are planning no improvements because they have recently renovated or moved.

Indicative of the importance many companies attach to office planning is the fact that in one out of four of the companies covered in the sur-

text continued on page 90

more photographs on pages 71, 74



"FUNCTIONAL MODEL" *designed by Ebasco Services, Inc., for headquarters of the Medical Service Association of Pennsylvania.*

COLOR: *Plant offices are being given a bright lift with new functional modular steel furniture, available in twelve basic hues.*

MEDITATION ROOM: *Nondenominational chapel is feature of State Mutual Life Assurance Company's building in Worcester.*

CATERING TO SECRETARIES: *In the Simmons Company's New York building, executive secretaries enjoy kitchen privileges.*

Only $3.50 a week puts a new Victor Calculator in your office!

Victor 40TH Anniversary Special— New Models—New Low Prices

Special Mult-O-Matic Printing Calculator. Model 72-85-54. Special low price. Automatically multiplies, adds, subtracts with flick of Simpla-Key. Automatic sub-totals or totals from same bar. Automatic credit balance.

Mult-O-Matic Printing Calculator. Model 74-85-54 (not shown). All features of Special (above) plus automatic Constant and automatic Total Transfer.

Automatic Printing Calculator. Model 75-85-54. Automatically divides, multiplies, adds or subtracts with a flick of the Simpla-Key. Automatic Constant, Total Transfer, and credit balance. Automatic sub-totals or totals from same bar.

Automatic Printing Calculator. Model 73-85-54 (not shown) Has all features of above, except Constant and Total Transfer.

VICTOR ADDING MACHINE CO.
CHICAGO 18, ILLINOIS
The answer to business problems since 1918
Victor Adding Machine Co. (Canada), Ltd. Galt, Ontario
Manufacturer of Business Machines, Cash Registers, Business and Industrial Systems, Electronic Equipment, Electri-Cars.

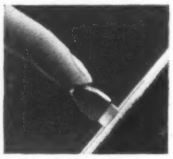
Avoid large cash outlay with New Lease or Purchase Plans

Now! Put a Victor Special Mult-O-Matic Printing Calculator to work for you for less than $3.50 a week. New Lease Plan saves your cash reserves, gives you the immediate benefit of time-saving, money-saving automatic figure-work. Low payments include expert Victor maintenance.

Or for a small down payment, and less than $4.75 a week, you can own this same Victor Calculator, and take 24 months to pay.

Other Victor business machines also available on lease or purchase plans at even lower payments. Now is the time to lease or buy because prices are low . . . terms easier . . . and there are more models to choose from than ever before in our 40-year history.

The exclusive Simpla-Key makes all calculations automatic!



Merely flick the Simpla-Key, enter the figures . . . the machine does the rest automatically. Multiplies, adds, subtracts or divides with *one key*—on one simple keyboard! Automatically prints figures with true symbols on tape just as you would write them. Does the work of two machines—adding machine and calculator—with no complicated rules, no special training needed.

***CALL YOUR VICTOR MAN.** He's listed in the Adding Machine section of the Yellow Pages under Victor. Or mail coupon today.*

Find Your
Nearest Dealer
In The
"Yellow Pages"

Victor Adding Machine Co., Dept. DR-958
Chicago 18, Illinois
Send me full details about your

☐ New Lease Plan ☐ New Calculators
☐ New Purchase Plan ☐ Adding Machines

Name____________________

Company Name____________________

Address____________________

City__________Zone______State______

It's here! New combined Folding & Inserting Machine

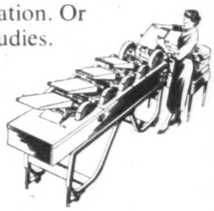
Folds and stuffs 500 letters, bills, etc. in envelopes in 8 minutes!

PB'S new combined folding and envelope-stuffing machine makes big savings in even small offices! Its inserter unit hooks onto any PB folder, or operates separately.

If you use the mails to promote your products or services, the new, low-cost Pitney-Bowes combined folder and inserter, Model 3300-FH can eliminate all the headaches of costly, time-consuming handwork, prevent disruption of office workers' routine and lick the problem of finding temporary, extra workers. And it's ideal for routine billing and statement mailing.

The new Pitney-Bowes Model 3300-FH folds—and inserts in envelopes—single enclosures at speeds up to 4,000 per hour—letters, cards, invoices, statements, bulletins, even stapled sheets. Multiple enclosures can be made with more runs through the machine. Faster, neater, less expensive than hand folding and stuffing.

This compact machine is set without tools, is easy to operate, can be run by any office girl. Even with only occasional use, the 3300-FH soon pays for itself in any office. Call the nearest Pitney-Bowes office for a demonstration—no obligation. Or send coupon for free illustrated booklet and case studies.



Model 3100, *with six optional stations, inserts up to six enclosures at speeds to 6,000 an hour. Offers optional hookup with a PB postage meter mailing machine.*

PITNEY-BOWES Folding & Inserting Machines

Made by the originator of the postage meter... 107 offices in the U. S. and Canada, with nationwide service coast to coast.

Other advantages of the 3300-FH

- *Only nationally sold and serviced combined folder and inserter on the market.*
- *The 3300, as an inserter by itself, is the lowest priced inserter available.*
- *Handles enclosure sizes (after folding) up to 8⅞ by 5½ inches.*
- *Automatic feed with continuous loading, stops to prevent jamming or tearing.*

FREE: *Handy desk or wall chart of new postal rates with parcel post map and zone finder.*

Pitney-Bowes, Inc.
1559 Crosby St., Stamford, Conn.
Send free ☐ *illustrated booklet and "case studies" on PB Folding and Inserting Machines;* ☐ *Postal Rate Chart.*
Name ________________
Address ________________

THE MODERN OFFICE

Cost Cutting in Your Office...

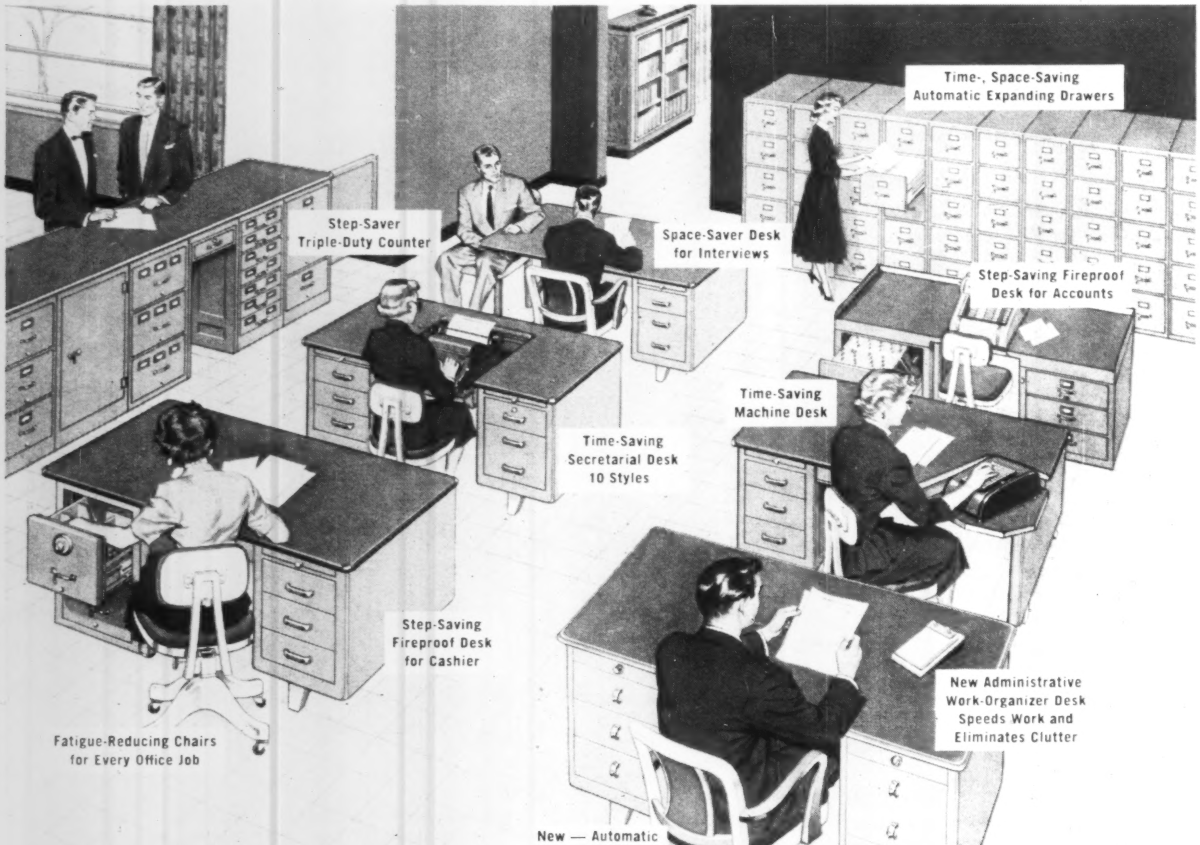
Cost reduction, a vital problem in all divisions of a business is nowhere as challenging as in the administrative departments. Office costs, having trebled during the past decade, are today *of primary concern* to top management.

It is in the record that since 1899 Shaw-Walker has been equipping business with "time-engineered" office facilities as inventive and ingenious as American production techniques, — that Shaw-Walker equipment and systems *have cut office costs*, saved floor space and made offices more livable.

For today's *cost-conscious* management Shaw-Walker "time-engineering" research has now produced — The work-organizer "clutter-proof" desk; Automatic expanding file drawers; Step-Saving Fire-Files and fireproof desks that protect records at point-of-use; Labor-Saving equipment and systems for tape handling; Error-Proof filing systems; Automatic correct seating chairs; Time-Saving payroll plans; and Numerous Other Devices that facilitate recording, filing and finding of records.

Some of these "*cost-cutters*" are pictured here. All are in the 252-page Shaw-Walker Office Guide.

Throughout, descriptions plainly state economies you can expect from Shaw-Walker "time-engineered" equipment and systems. *Free to Management when requested on business letterhead. Write Shaw-Walker, Muskegon 48, Michigan.*


Time-, Space-Saving Automatic Expanding Drawers
Step-Saver Triple-Duty Counter
Space-Saver Desk for Interviews
Step-Saving Fireproof Desk for Accounts
Time-Saving Machine Desk
Time-Saving Secretarial Desk 10 Styles
Step-Saving Fireproof Desk for Cashier
New Administrative Work-Organizer Desk Speeds Work and Eliminates Clutter
Fatigue-Reducing Chairs for Every Office Job
New — Automatic Correct Seating
Also, Time-Saving Systems for Record-Keeping — Automated or Manual

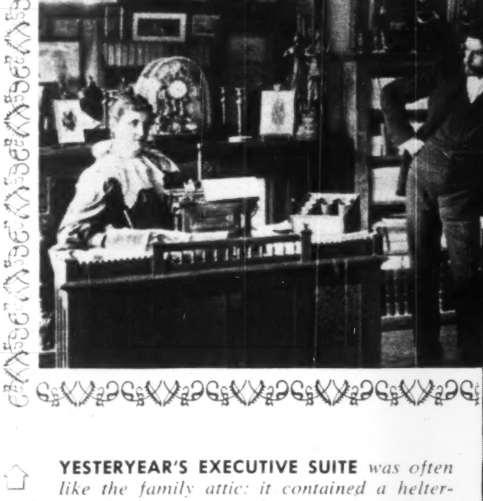
"Built Like a Skyscraper"

SHAW-WALKER

Largest Exclusive Makers of Office Equipment
Muskegon 48, Mich. Representatives Everywhere

The Executive Suite: 1958

AS BUSINESS becomes more complex, the company president's office is experiencing a countertrend toward simplicity. Long a symbol of status and often an expression of the corporate—as well as the individual—personality, the top executive's office is becoming a smartly designed, well-lighted efficiency room where decisions may be weighed without distraction. In many new executive suites desks resemble intimate conference tables—in recognition of one of the president's most persistent duties: seeing people.



YESTERYEAR'S EXECUTIVE SUITE *was often like the family attic: it contained a helter-skelter of objects that were kept out of sentiment and served little purpose in the day-to-day business of living. The light was poor, the quarters crowded.*

TODAY'S PRESIDENT'S OFFICE *is more likely to resemble this suite occupied by Grant G. Simmons, Jr., president of the Simmons Company. Recessed wall in another part of the room provides storage, file, and coat and hatrack space.*

INNOVATION AND TRADITION *surround H. L. Plumley, president of State Mutual Life.*

PRESIDENTIAL SUITE *for E. M. Bronfman in Seagram Building, all-bronze skyscraper.*

REALISTIC MURAL *painted in oils by artist Eric Sloane decorates one wall in Chicago office of Morton Salt Company's president Daniel Peterkin, Jr.*

Two *NEW* Teletype tape

TELETYPE
THIS IS PRINTED • CHADLESS TAPE • EXCLUSIVE WITH TELETYPE

TAPE PUNCH

Teletype Model 28
Typing Reperforator

TAPE READER

Teletype Model 28
Transmitter-Distributor

units speed work, cut costs

More uniform work loads, greater accuracy, lower cost, faster handling, greater operating efficiency in:

- **sales, sales analysis, warehousing, accounting, purchasing, production control, shipping, receiving, manufacturing;**
- **communications, data processing, automation and paperwork simplification.**

These new punched tape units offer you the opportunity of extending your communication and business systems into new departments at a relatively low cost. They can be used individually . . . or in combination with other Teletype equipment . . . or with such business machines as computers, calculators and card punches.

All advanced Teletype Model 28 features—operation at 100 words per minute, handsome styling, compactness, extremely quiet operation, modular design, metal clutches that require oiling only once or twice a year.

TAPE PUNCH • The Teletype Model 28 Tape Punch is a receiving unit—for message relaying in communication systems . . . integrating data from several sources into a single tape . . . monitoring . . . by-product tapes.

Features and Specifications:

1. Receives incoming sequential signals and translates them into punched code combinations in tape.
2. Types corresponding characters on the tape.
3. Provides facility for parallel-wire output of incoming signals, with simultaneous punching of tape, for control of external equipment.

Speed 100 wpm (or lower speeds where required for compatibility with existing systems). Produces chadless (partially punched) 5-level code tape, $\frac{11}{16}$" wide. Prints on tape. Dimensions, a compact 9½" high, 13" wide, and 14⅛" deep.

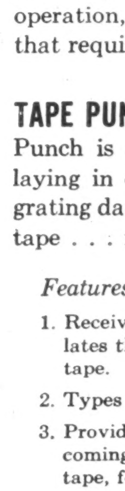
TAPE READER • The Teletype Model 28 Tape Reader is a transmitting unit. When punched tape is fed into the unit, it "reads" the code combinations and automatically sends them to their destination. Serves as a sending unit in communications systems . . . read-out device for business machines . . . control mechanism for automated equipment.

Features and Specifications:

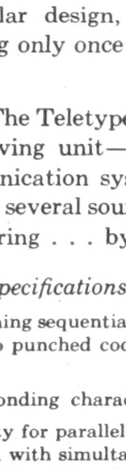
1. Translates code in perforated tape into electrical impulses for sequential transmission.
2. Translates code in perforated tape into electrical impulses for parallel-wire transmission.
3. Receives electrical impulses from external parallel-wire source and translates them for sequential transmission.

Operates at 100 wpm (lower if required). Handles chadless or fully punched tape.

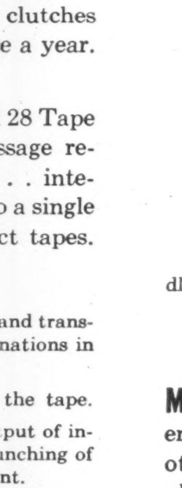
MORE INFORMATION • For descriptive literature on the new Punch and Reader—or other units in the Teletype Model 28 line—please write to Teletype Corporation, Dept. 11J, 4100 Fullerton Avenue, Chicago 39, Illinois.



MODEL 28 PRINTER, SEND & RECEIVE



MODEL 28 PRINTER, RECEIVE ONLY



MODEL 28 ASR COMPOSITE SET

TELETYPE®
CORPORATION
SUBSIDIARY OF *Western Electric Company* INC.

How Two Companies Spruce Up for Growth

Among the pace-setters in contemporary office design and streamlined efficiency are insurance companies, which must solve massive paperwork processing problems.

TWELVE FLOORS of a new twenty-story office building in downtown Newark, N.J., house the headquarters of the Mutual Benefit Life Insurance Company, in a structure built to meet the needs of expanding business and provide for the company's anticipated future growth.

Large office floors are of a modular design to allow maximum flexibility in the movement of partitions, telephones, and electrical equipment. Floors are covered with rubber or vinyl tile, walls with washable coverings. Sound is deadened by acoustical ceiling tile, and recessed fluorescent fixtures provide maximum light intensity with minimum eyestrain.

A 1,000-car garage behind the new office building provides parking facilities for the staff and visitors.

CENTRAL RECORD FILES—*including policy applications, cash books, correspondence, mortgage loan records, and 12 million punched cards—located in 27,000-square-foot area.*

OPEN, OUTSIDE WORKING AREAS *cover more than 45,000 square feet on each major floor. In the center is the "management core," a windowless executive work area.*

SURGING POSTWAR growth convinced another insurance company six years ago that it was out growing its old and obsolescent space in downtown Worcester, Mass. Unlike Mutual Benefit, which stayed downtown, State Mutual Life Assurance Company of America moved two miles out to a 31-acre site, thus "compromising between a downtown skyscraper and a rural campus" and, according to the company, retaining most of the advantages of both.

The final plan evolved a design which abandoned the time-honored right of executives to corner offices, and concentrated most of them in a central "management core."

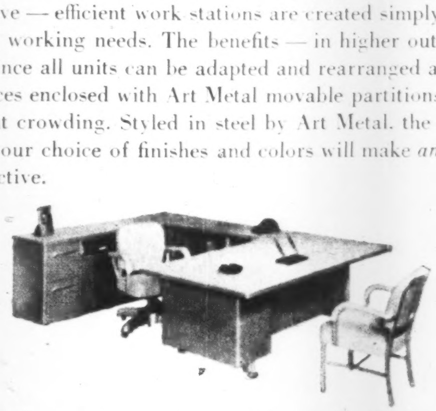
Throughout, lighting and decor have been painstakingly coordinated. Specially designed light fixtures, recessed deeply in the ceiling, diffuse light evenly, and there are 38 separate air conditioning systems.

arrange for today's needs . . . rearrange for tomorrow's

with **Art Metal** "Modulars"

ART METAL "MODULARS" let you meet today's needs perfectly and also protect your business from future loss of efficiency caused by inflexible office layout. For every job function in the office — specialist, clerical and secretarial as well as executive — efficient work stations are created simply by combining interchangeable Art Metal units to fit individual working needs. The benefits — in higher output and faster handling of office business, are permanent, since all units can be adapted and rearranged at will whenever requirements change. In open groups or in private offices enclosed with Art Metal movable partitions, "Modulars" actually save up to 30% in office floor space without crowding. Styled in steel by Art Metal, the originators of metal office furniture. "Modulars" in your choice of finishes and colors will make *and keep* your office impressive, attractive and productive.

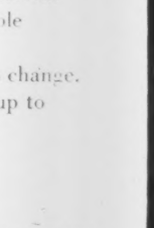
Well-planned convenience in all office areas is provided by space-saving "Modulars" in "L" or "U" arrangements . . . in either right or left hand setups.



Many colors, finishes, and optional setups afford widest selection at low initial cost, together with complete freedom of rearrangement.

NEW EXECUTIVE HANDBOOK

Free—in full color . . . the most comprehensive guide to the use of modular office equipment ever published. Ask your local representative (listed in the Yellow Pages) for a copy of "Modulars." Or write to Art Metal Construction Co., Jamestown 7, N. Y.



making offices better for business since 1888

© A. M. C. CO. 1958

Art Metal
Jamestown, New York
U·S·A

BURROUGHS ELECTRONIC COMPUTERS ON CIVILIAN JOBS ALONE ALREADY TOTAL 273

Defense Also Taps Burroughs Electronic Wizardry—to Tune of $400 Million

FIRM'S RESEARCH SPURS A D P ADVANCES

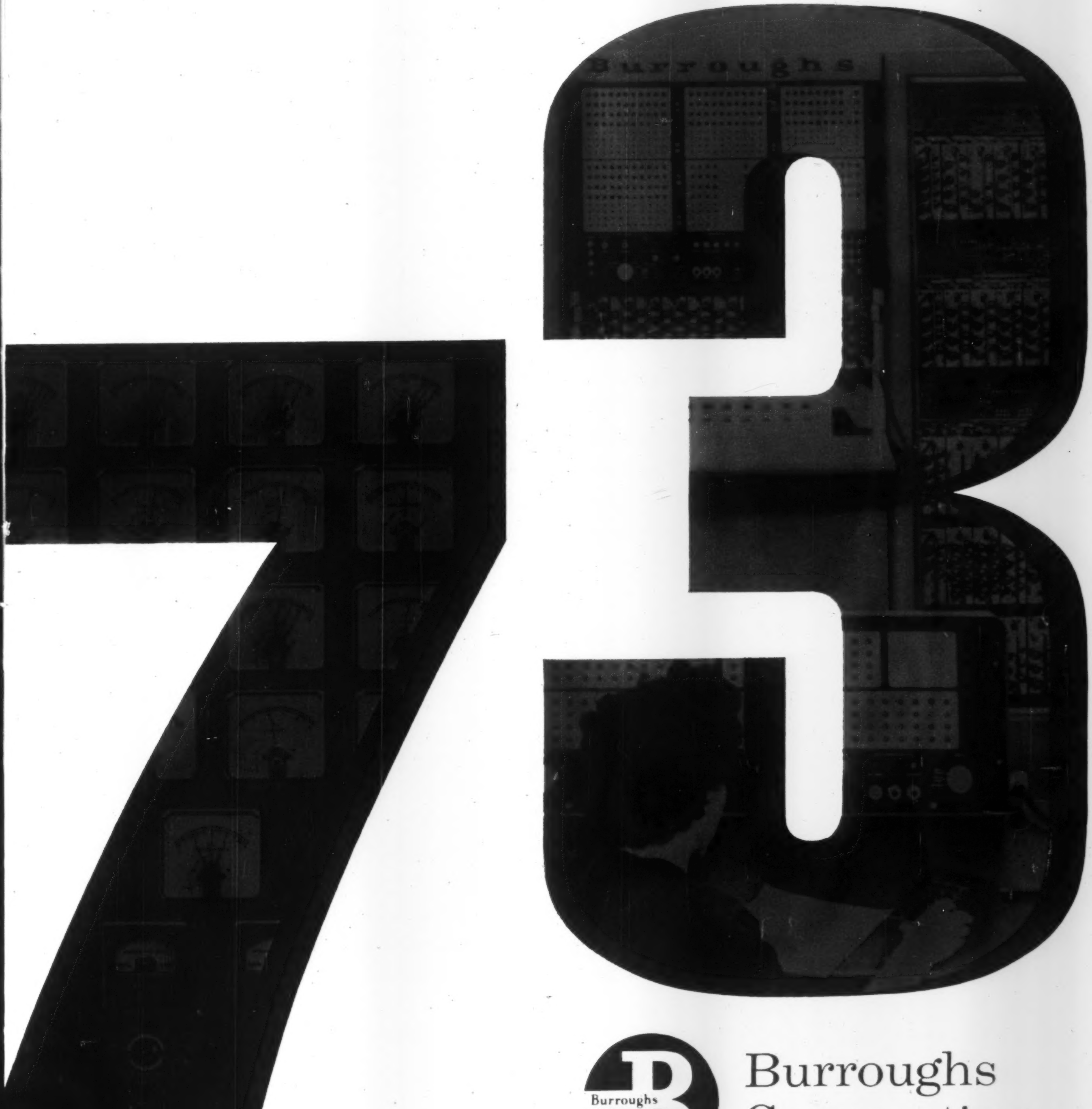
DETROIT — Burroughs fast pace in electronics has, in a remarkably short time, resulted in 273 civilian installations of the firm's giant, medium and small electronic computers.

In addition, U. S. Defense has already called on Burroughs to produce well over $400 million worth of electronic data processing and digital communications equipment. Applications: Everything from guiding 15,000-mph ballistic missiles such as Atlas to processing intricate data in such vital defense systems as SAGE air defense.

UNMATCHED A D P LINE

Hard at work along with the computers in both civilian and defense installations are members of the Burroughs family of input-output equipment—biggest in the automatic data processing field. These include high-speed input and read-out devices, many types of punched paper and magnetic tape equipment, electronic filing systems, and equipment for high-speed processing of punched cards.

In all, the far-ranging Burroughs data processing equipment line is a resoundingly successful result of the firm's comprehensive, long-range research program. Spearheaded by 3,500 scientific, engineering and support personnel, the program's goal is the *continuing* creation of even more advanced data processing equipment, in



Burroughs
Corporation

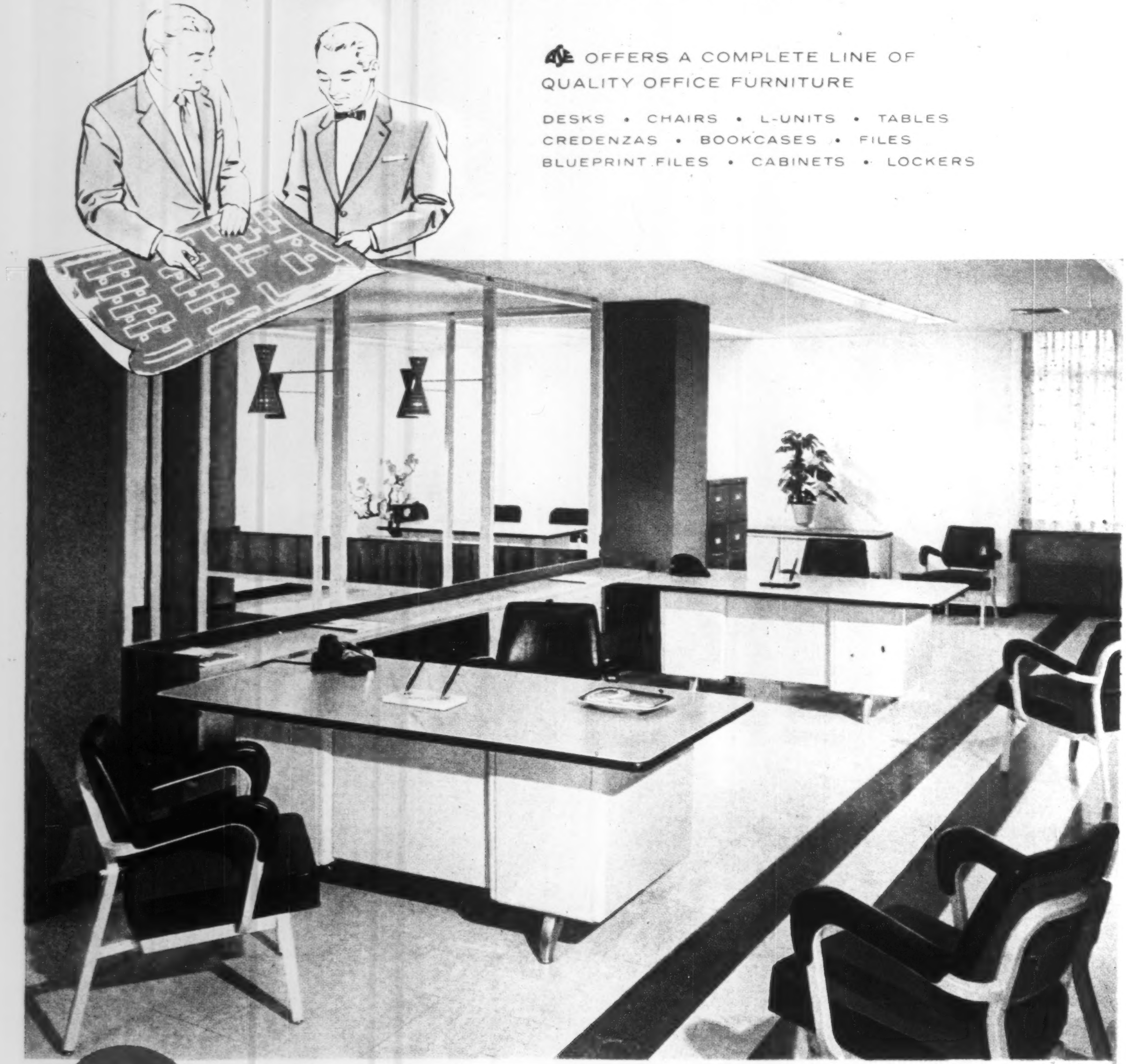
"NEW DIMENSIONS / in electronics and data processing systems"

THINKING OF A NEW OFFICE?
SEE YOUR ASE DEALER

Tired of the years-old surroundings you work in? Longing for a layout like this? Then the man for you to see is the one who handles ASE. He'll gladly help you plan an efficient, attractive office . . . be it general, departmental or executive. From his complete, comprehensive ASE line, you can choose the design, styling and finish that's right for you. He's courteous, capable, qualified to help you. That's his business. See him today.

ASE OFFERS A COMPLETE LINE OF
QUALITY OFFICE FURNITURE

DESKS • CHAIRS • L-UNITS • TABLES
CREDENZAS • BOOKCASES • FILES
BLUEPRINT FILES • CABINETS • LOCKERS



ALL-STEEL EQUIPMENT INC. AURORA, ILLINOIS

TODAY'S OFFICE

continued from page 51

trends in clerical productivity are scarce or nonexistent, but experts point out that today's clerk, supported by batteries of new machines and working through streamlined methods, is unquestionably producing a lot more than his or her counterpart of ten or twenty years ago.

The real explanation is simply that mechanization and scientific management have not yet made the inroads in the office that they have in the shop. Also, the constantly growing output of automated factories and the increasing complexity of distribution channels call for more paperwork and communications than ever before. Proliferating organization structures, committee management, and management's growing urge to keep everyone informed have further added to the paperwork load.

Building profits by cutting costs

Since many companies feel they are getting less than their clerical dollar's worth, there is a growing concentration on improving office operations. As a result, many companies are scoring impressive savings which can be added directly to profits (see page 99).

Not without struggle can a medium-size manufacturer add $100,000 to sales in today's market. But many are finding that a saving of $4,700, which amounts to the same thing, is not too difficult to come by in the office area.

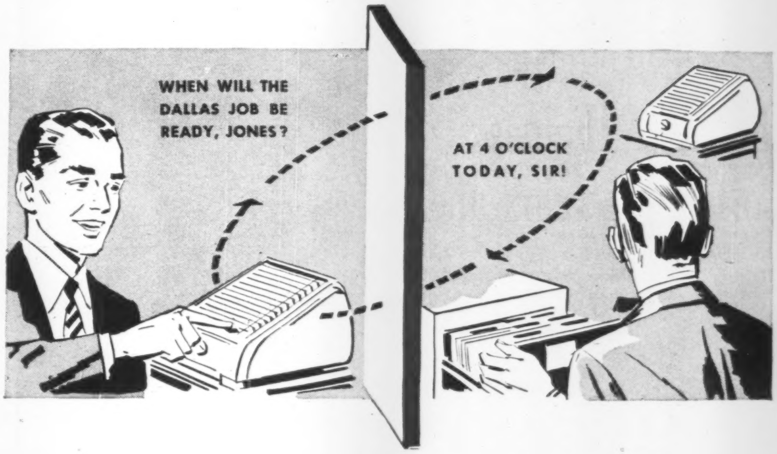
But before management can begin to chalk up real savings in office operations, a firm and inclusive definition of office costs is almost a prerequisite. The DR&MI survey shows that many companies—40 per cent of the sample—do have such figures (see page 54). But they are still a minority.

New staff services and specialties have sprung up in recent decades to help management develop and act upon information needed to control day-to-day affairs. But, ironically, these very services—market research, personnel administration, new product departments, industrial research, and so on—have come into the business world trailing clouds of paperwork.

Likewise, the new equipment—computers, duplicators, tab equipment, IDP machines—to which management is turning for help in controlling its operations is itself an awesome producer of paperwork. The effective management of these new complexes of equipment presents a new and challenging frontier to imaginative administrators.

So, with many forces lowering the paper curtain between top management and effective control of an enterprise, companies realize increasingly that new

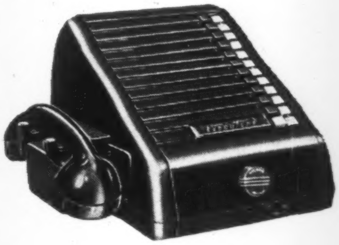
How to get more working minutes per hour!


WHEN WILL THE DALLAS JOB BE READY, JONES?
AT 4 O'CLOCK TODAY, SIR!

There's no need for personnel to waste valuable time walking back and forth for information and instructions. With Executone Intercom they just push a button and talk—*instantly!*

Walking time becomes *working* time. Telephone lines are kept open for outside calls; roving employees are located *immediately!* Production is increased, costs are cut.

Installations in every type of business and organization *prove* that Executone *pays for itself many times over!*



PLUS "BUILT-IN" COURTESY!

Executone protects your privacy, never interrupts. Its Chime-Matic® signalling announces calls by soft chime and signal light! Mail coupon below and find out how *courteous* Executone pays for itself in more *working* minutes per hour!

Don't Walk . . . Talk!

Executone
INTERCOM AND SOUND SYSTEMS

ACT NOW!

EXECUTONE, Inc., Dept. P-2, 415 Lexington Ave., New York 17, N. Y.
It sounds interesting. Send me the following—
at no cost or obligation:

☐ "Talk Lines"—Case history magazine
Information on:
☐ Switchboard Relief
☐ Inter-Office & Plant Communication
☐ Locating Personnel
☐ High Noise Level Coverage

Name__________
Firm__________
Address__________
City__________

In Canada—331 Bartlett Ave., Toronto

"I tried them all... the NEW Thomas Collator is years ahead!"

This may sound melodramatic, but girls do get carried away over the *New* Thomas Collator. The modern functional design looks well anywhere. It's been designed for the operator to handle collating in the *fastest* and *easiest* way possible. No more mad scrambles and hectic last minute deadlines. The Thomas Collator turns a time consuming and irritating chore into a pleasant and efficient job.

One more thing, don't be misled by gadgets or trick names; make your own comparison and you'll know why more people buy Thomas Collators than *all* other makes combined.

Thomas Collators Inc.
Dept. K, 50 Church Street, New York, New York

Eleven models—to meet your specific needs

Visit our booth at the National Business Show

Coming next month

How to Get the Most for Your Advertising Dollar

Don't miss this major feature in the October

Dun's Review and Modern Industry

programs to lift it are now needed.

Probably the most significant result of data discipline is the fresher, more pointed information for top management on specific profit possibilities—the profitability of individual products, territories, and even customers.

Says Howard Ellis of Du Pont's Management Engineering Section, "We go on the principle that if through an *integrated* data approach we can supply management with full, fresh facts, they are then provided with information that suggests vital questions that they might not ordinarily ask, and which can often aid them in making timely decisions."

Progress in paperwork

In the past few years there have been many major break-throughs on the paper front in business and industry. The coming of the computer focused attention on office operations as never before. Despite initial disappointment in many companies (DR&MI, August 1958, page 36), the long-term results will certainly be healthy.

Integrated data processing, which has quietly been scoring many significant gains in the battle against paperwork, is only four years old. And the rise of systems work to the level of a recognized corporate department is not many years older. A significant example of the kind of progress now being recorded in the field of office hardware is supplied by recent developments in teleprinter equipment.

Fifty years were needed to advance the transmission and receiving speed of teleprinter equipment from 60 to 100 words. Recently, a model was produced (for the U.S. Army Signal Corps) that prints at 750 words a minute!

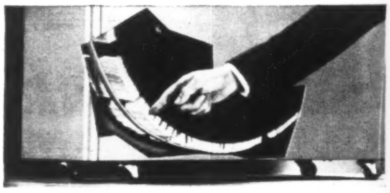
The variety of present-day office machines alone clearly indicates how far mechanization has already gone. We now have mechanized files, electronic files, and collators, staplers, pencil sharpeners, and even erasers, all electrically powered. By-product tape activates office machines automatically, and special devices can couple two different office machines so that both can take in and act on the same data simultaneously. For instance, a girl putting data into an accounting machine can also keypunch cards at the same time by using a coupling device.

The dream of many management people—the office machine that is able to read hard copy and act upon it—is already a reality in several installations that have a large enough volume of paperwork to justify the equipment.

As both the paperwork needs of industry and the office machinery become more complex, the need for communication between industry and equipment producers grows. Makers of the hardware say that if industry would be more

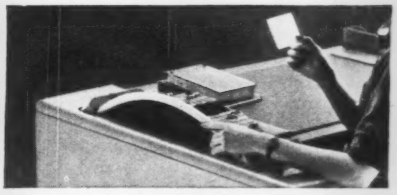
How to spot the 32 Elm account in 1½ seconds

NEW MOSLER REVO-FILE gives you accounts receivable fast...obsoletes all other card files



No fall out! Exclusive patented Revo-File belt keeps cards perfectly in place, protects against wear. If you have 2,500 or more cards, Revo-File is for you.

No attachments! No hole punching! Cards not attached to drum. Just drop your present cards into Revo-File.



No effort! Cards come to clerks with spin of drum. Revo-File available in manual and automatic electric models.

New Mosler Revo-File is the *unique* rotary active-card file. It's the *only* rotary card file that: cuts reference time to 1½ seconds; contains 5 times as many cards as other systems hold in the same space; reduces all finding locations to just one; eliminates changeover costs. Now there's no more tugging, toting, flap-flipping or pulling...Revo-File is *modern*...clerks work while comfortably seated. And remember, one quick spin of the Revo-File drum gives you *the* card you want...in just 1½ seconds. For further information, send coupon today.

NEW **MOSLER** REVO-FILE

...the modern rotary card file...another fine product of
The Mosler Safe Co., 320 Fifth Avenue, New York 1, N.Y.

REVO-FILE DIVISION • THE MOSLER-SAFE CO.
Department DR-958, 320 Fifth Avenue, New York 1, N. Y.

Gentlemen: I have 2,500 or more cards and—

☐ I am interested in additional information on Mosler Revo-File.

☐ I am interested in a free 30-day office trial of Mosler Revo-File.

Name____________________

Position____________________

Company____________________

Address____________________

City________________ Zone____ State________

THE ALASKA LINE
ALASKA STEAMSHIP CO.
A

Bruning Copying Machines Provide *Smooth Sailing* Paperwork on the Rough Alaska Run!

■ The Alaska Steamship Company, Pier 42, Seattle, Washington, pioneer in the Alaska trade and developer of the nationally-recognized "unitized" cargo service, has solved a big problem on the rugged Alaska run with modern Bruning Copyflex copying machines.

With Copyflex, Alaska Steam processes up to 1700 bills of lading per ship on a fast, one-writing basis. Shippers are supplied inexpensive translucent bill of lading forms on which they write or type shipping information. Directly from these forms, Alaska Steam uses Copyflex to reproduce freight bills, notices of arrival, delivery orders. No clerical copying errors. Alaska Steam greatly reduced clerical work, gives shippers faster and better service!

Copyflex can bring you remarkable paperwork benefits, too! Machines are clean, odorless, economical—letter-size copies cost less than a penny each for materials. Call your nearby Bruning office, today, or write: Charles Bruning Co., Inc., 1800 Central Rd., Mt. Prospect, Ill. In Canada: 105 Church St., Toronto 1, Ontario.

H. E. Chesebrough, veteran terminal agent of Alaska Steamship Company, pioneered the use of Bruning copying machines which have resulted in paperwork savings for his company and better service to shippers.

Copyflex Model 575—Bruning's top model for ultra-fast, heavy-volume copying. Full 46-inch printing width. Other models for every use, including desk top model.

BRUNING
Copyflex

explicit about data requirements, it would be easier to make economical equipment to fill the bill. They point to the special committee set up by the American Bankers Association to work on the problem of feedback communications, and at the same time to the brisk strides made in recent years by banks in processing paperwork.

Machines aren't all

Systems experts, however, insist that existing equipment is more than adequate for all the data-handling needs of business at the present time. What is needed, they insist, is not more hardware but more hard thinking about the ways to put the equipment to best use.

Says Richard Neuschel, a principal of McKinsey & Co.:

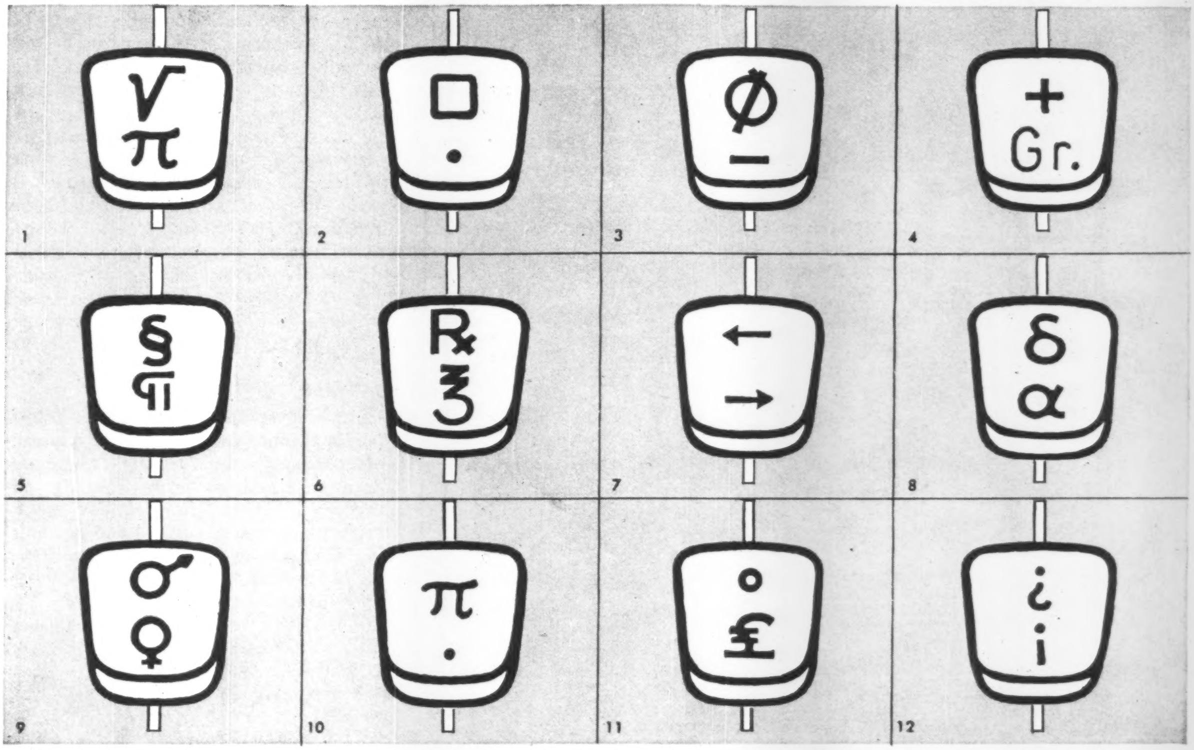
> The ability to produce information in American business has far outstripped management capacity to assimilate information and to use it intelligently in the management of the business. We have seen situations in which improvement in the capacity to generate information has resulted in report strangulation, rather than an improvement in management understanding of the business and the various factors at play, as economic conditions change. Executives may get more information faster, but still have less real skill, management savvy, and hard-nosed business judgment in extracting significant facts from the information newly made available.
>
> The first need in this whole area of processing data is to exercise more skill, perception, and discipline in identifying the facts that are really essential or can be profitably used in the management of the business. This need is not now being met by the traditional accounting and statistical concepts that represent the kinds of information we have been getting for the past twenty years.

Experts emphasize that much waste effort results from thinking too rigidly in terms of "the office" when analyzing company information-handling processes and needs. Record creation, processing, and storage occur in nearly every part of the corporate body—traffic, shipping, personnel, sales analysis, production control, finance, and many others. Concentrating on such traditional office areas as order handling and accounting, to the neglect of other aspects of the information function throughout the company, can lead to such management weaknesses as:

- Lack of integration or coordination among data handling sections throughout the company
- Duplication of essentially similar paperwork in various departments
- Concentration of standardization and improvement programs in the traditional "office" areas while other sections go their own way.

And, of course, management's thinking of the "office" as a place rather than

Is the "key" to your business here?



...Olympia offers specialized keys and keyboards for every need!

The signs and symbols above are used daily in such specific fields as: 1. Electrical Engineering; 2. Iron and Steel Industry; 3. Wood Industry; 4. Textile Industry; 5. Commerce; 6. Medical Profession; 7. Chemical Industry; 8. Engineering; 9. Genealogy; 10. Mathematics; 11. Finance; 12. Import-Export and Foreign Languages.

Select from hundreds of combinations . . . designed for every industrial, commercial and professional use! They eliminate time-consuming handwriting . . . increase production and efficiency.

Your choice, too, of over 100 foreign language keyboards . . . from Afrikaans to Esperanto!

More outstanding reasons why Olympia is the world's finest typewriter to do business with! Precision-built—they're completely equipped with every worthwhile feature for easier—faster—finer typing.

Put one to the test in your office—see what Olympia can do—before you decide on any other typewriter!

Nation-wide sales and service through authorized Olympia dealers

Write For Complete Information Today!

OLYMPIA Typewriter Division D-1
Inter-Continental Trading Corp.
90 West Street, New York 6, New York

Gentlemen:

Please send me complete information about your Olympia precision typewriters...and, the selection of special types and type combinations available.

NAME
COMPANY
STREET
CITY ZONE STATE

for typing perfection

Olympia

WRITES BEST OF ALL . . .
BECAUSE IT'S BUILT BEST OF ALL

OLYMPIA DIVISION
Inter-Continental Trading Corporation • 90 West Street • New York 6, New York

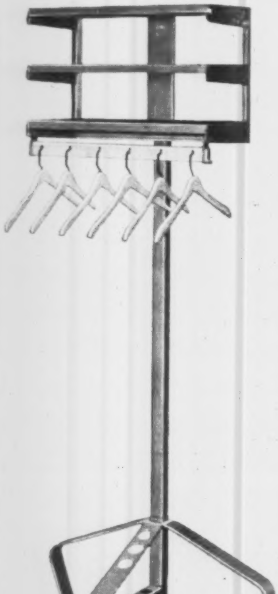
new designs! new features! new values!

BORROUGHS

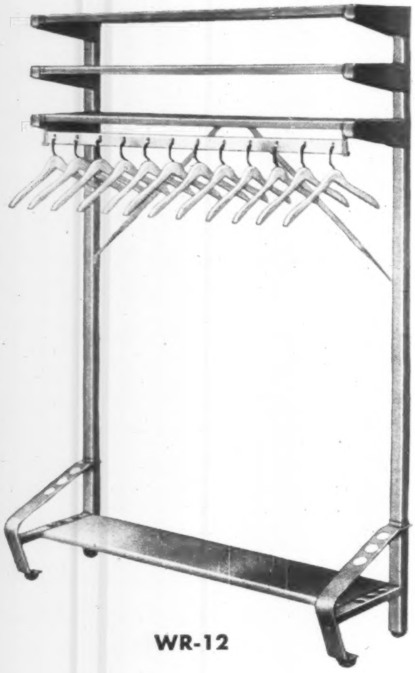
wrap racks

the racks with the exclusive 3-way hanging hanger bar

This richly plated, mar-resistant hanger bar holds a basic number of hangers on front side . . . reverse the bar from back to front, and you increase capacity 1 hanger per foot . . . or use top of bar for greatest hanger capacity.



WR-6



WR-12

Your choice of 5 colors—Spring Green, Dark Green, Gray, Fall Tan, or Brown—in electrostatically baked-on enamel.

The next time you visit your office equipment dealer, ask him to show you Borroughs' new garment racks. They are available in 6-, 9-, 12- and 15-capacity models which can easily be converted to 8-, 12-, 16- and 20-capacity units with Borroughs' exclusive, 3-way hanging hanger bar. Models WR-9, WR-12 and WR-15 come in single or double face, and "add-units" are obtainable. Hat shelves have 3 raised, non-dust-collecting apex-ridges. Rubber shoes protect floors. Umbrella holders (each accommodating 3 umbrellas) are a functional part of Borroughs' new wrap racks.

send for literature

BORROUGHS MANUFACTURING COMPANY OF KALAMAZOO

A SUBSIDIARY OF THE AMERICAN METAL PRODUCTS COMPANY OF DETROIT

3064 NORTH BURDICK ST. amp® KALAMAZOO, MICHIGAN

as a function—which it really is—results in failure to designate an executive to make company-wide improvement.

Much of management's difficulty in making the office pay its own way has resulted from this sort of cloudy thinking about the nature of the office. To the top executive, it is the place he has to walk through on the way to his private sanctum, where the "real" business of the company is carried out. To middle management, it's the complex of supervisors, clerks, and files that must produce the operating reports needed to guide top management month by month. And to the clerical supervisor, whose status is too frequently measured by the number of people he supervises, it's where his staff shuffles papers while he tries to cajole middle management into giving him a few more clerks.

Total approach is needed

Both equipment producers and professional office experts say that management too often fails to integrate procedures and systems throughout the entire organization. Sales routines, manufacturing routines, control and accounting routines—all must be coordinated for maximum benefit to over-all company profits. Otherwise, different viewpoints about routines that affect various departments can seriously hamper operations.

For example, if you ask the sales manager to define inventory control, he will probably say that it is a gimmick to keep warehouses full, so that when an order comes in it can be filled immediately to keep the customer happy.

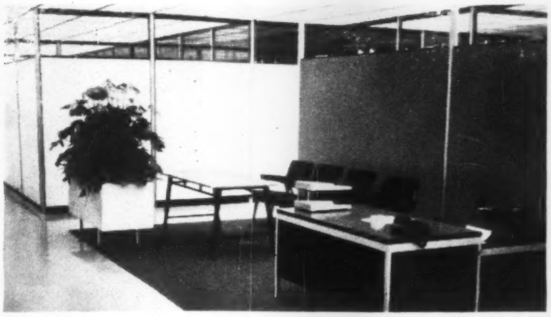
If you ask the manufacturing man, he will say inventory control is an arrangement by which he can run a two-year supply, keep unit costs down, and balance out production.

The controller looks upon inventory control routines as a means of keeping the total inventory investment low. The auditor will say that it involves putting in a lot of red tape procedures to keep the help from helping themselves. And the traffic manager is likely to see inventory control as an arrangement to enable him to ship everything in large batches in order to get the lowest possible shipping costs per unit.

But if top management has a clear and integrated concept of inventory control, and can impose it on all parts of the organization, many costly inefficiencies that flourished under the old order can be eliminated.

Many paperwork snags are due to bad organization. Hazy, indistinct staff-and-line relationships typically lead to poor paperwork procedures. But if management sharply defines the organizational goals and sets forth each functional goal of each department, then it can begin to pinpoint the kind of data

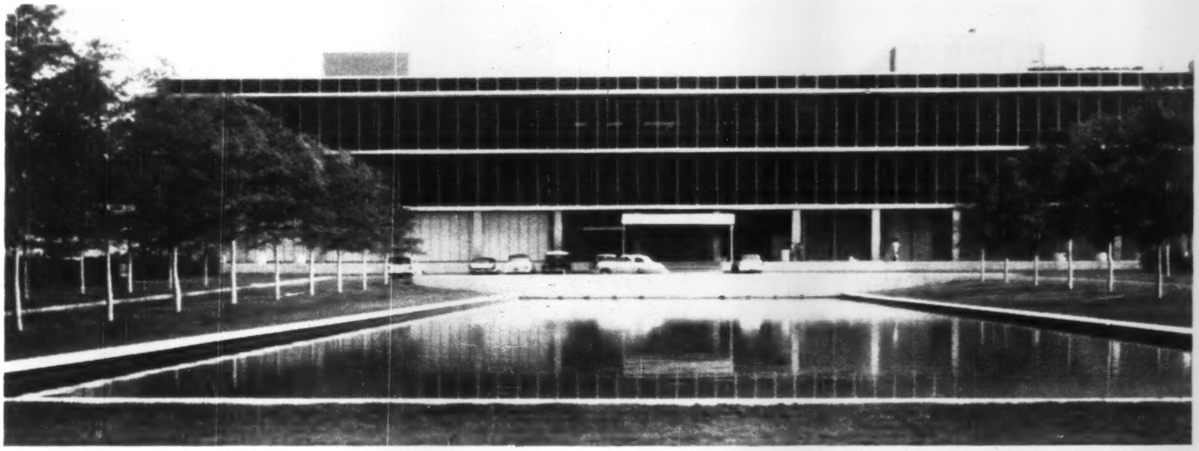
ALUMINUM HONEY-COMB luminous ceilings and aluminum furniture are among the building's many outstanding features.



MORE THAN A MILE of movable aluminum partitions are used throughout the building. Their flexibility is demonstrated in the purchasing reception area which is shown above.

SPACIOUS LOUNGE designed for use by employees is adjacent to modern cafeteria, terrace, and sundeck. The lounge features furniture of aluminum frame construction.

REFLECTOR POOL serves dual purpose. Adding grace and beauty to the building's main approach, it also provides water storage for irrigation needs.



Ebasco Services Incorporated—Project Managers
Skidmore, Owings & Merrill—Architects
George A. Fuller Company—General Contractor

NEW HORIZONS FOR ALUMINUM

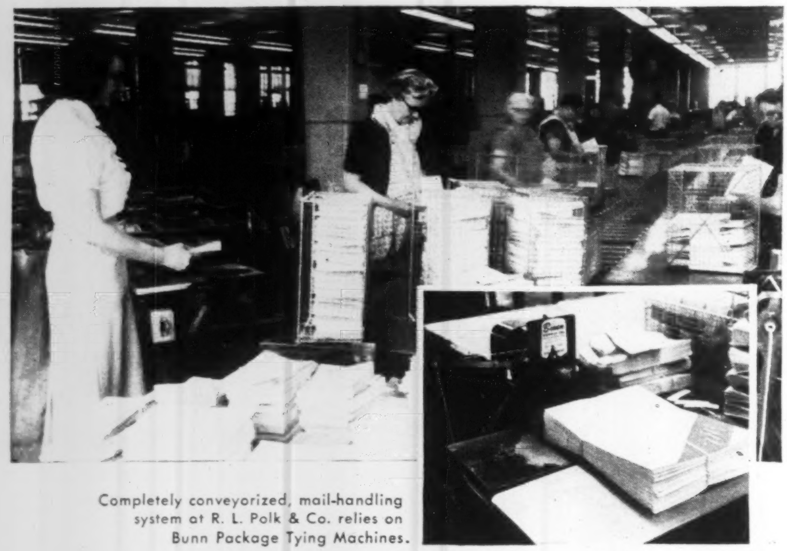
Aluminum, totaling over one million pounds, was used in every practical application in the recently completed general office building of Reynolds Metals Company at Richmond, Virginia. For example, vertical louvers of aluminum, automatically controlled by astronomical clocks, assure maximum use of natural light yet eliminate direct rays of the sun. Completely air-conditioned, the structure contains nearly 300 thousand square feet of space situated on 38½ acres of landscaped property. Dramatic use of aluminum, glass, automatic louvers and modular system of construction make the building a notable contribution to modern architecture.

Ebasco's responsibilities on this project included space planning and construction management services. To learn how Ebasco can serve your building needs, send for our brochure, "Engineering, Design and Construction Services." Address: Ebasco Services Incorporated, Dept. N, Two Rector St., New York 6, N. Y.

ENGINEERS · CONSTRUCTORS
EBASCO
BUSINESS CONSULTANTS

NEW YORK • CHICAGO
DALLAS • PORTLAND, ORE.
SAN FRANCISCO
WASHINGTON, D. C.

Consulting Engineering • Design & Construction • Financial & Business Studies • Industrial Relations • Insurance, Pensions & Safety • Purchasing, Inspection & Expediting • Rates & Pricing • Research • Sales & Public Relations • Space Planning • Systems, Methods & Budgets • Tax • Valuation & Appraisal • Washington Office



Completely conveyorized, mail-handling system at R. L. Polk & Co. relies on Bunn Package Tying Machines.

Machine-tying beats hand-tying 10 to 1

Bunn automatic tying "keeps mail on the move" for R. L. Polk*... handles up to 1,500,000 units a day!

"With a mailing volume like ours," says Mr. M. K. Buda, Manager of Direct Mail Production for R. L. Polk's busy Detroit office, "hand methods are costly. When it comes to tying, we rely fully on the Bunn Tying Machine!

"Yes," says Mr. Buda, "Bunn automatic tying has been saving us time and money since 1933. In all, we now use 26 Bunn Machines."

Mail-handling specialists since 1870, R. L. Polk & Co. know whereof they speak. Whether your volume is in the hundreds or hundred-*thousands*, Bunn automatic tying can streamline your mailing operations.

*Internationally famous direct mail organization

Ties anything. And mail is just part of the story. Packages, magazines, boxes, bundles: yes, literally *anything* you now tie by hand can be tied neater, better and faster on a versatile Bunn Machine.

Operation is simple, positive. You just position the object to be tied, then step on a trip. Automatically, you get a precision tie ... in 1½ seconds or less. Faster than hand-tying? About 10 times. And the Bunn knot saves on twine, too.

Send today for full data on how Bunn automatic tying can cut costs for you. Use the handy coupon below.

BUNN

PACKAGE TYING MACHINES
Since 1907

B. H. BUNN CO., 7605 Vincennes Ave., Dept. DR-98 Chicago 20, Ill.
Export Department: 10406 South Western Ave., Chicago 43, Ill.

MAIL COUPON NOW FOR MORE FACTS

GET THE WHOLE STORY
Send today for this fact-packed booklet, which illustrates the many advantages of Bunn Tying Machines.
Or let a Bunn Tying Engineer show you.
No obligation.

B. H. BUNN CO., Dept. DR-98
7605 Vincennes Ave., Chicago 20, Ill.

☐ Please send me a copy of your free booklet.
☐ Please have a Bunn Tying Engineer contact me.

Name__________
Company__________
Address__________
City__________ Zone____ State______

that should be supplied into the system. Many observers feel that the duplication of work among the different functional elements of office corporate operations is little short of appalling. And it's often next to impossible to eliminate the duplications without eliminating the functional divisions and responsibilities that have bred them.

Says Ben Garrott, director of applications research at Standard Register Company:

> If you go into the average plant and try to talk to the plant superintendent about material requisitions, you're wasting your time. If there is anything less interesting than a "damn piece of paper," he can't think of it. Maybe he's staying awake nights worrying about something that's traceable to a fault in his material-control system. Even so, the chances are he's never consciously realized that this piece of paper isn't just an arbitrary thing that's been imposed on him, but something that is actually needed, a functional part of the operation. If that piece of paper isn't doing its part, those big castings he's so proud of won't have the right holes in the right places. There is an inclination to separate mentally the things that you can lay your hands on—the things that you sell to your markets—from the information that makes them possible.

However, the realization is growing that there is a very real connection between the handling of information and the handling of physical product. The connection can't be ignored, unless it's at the expense of the success of the organization.

Combining Functions

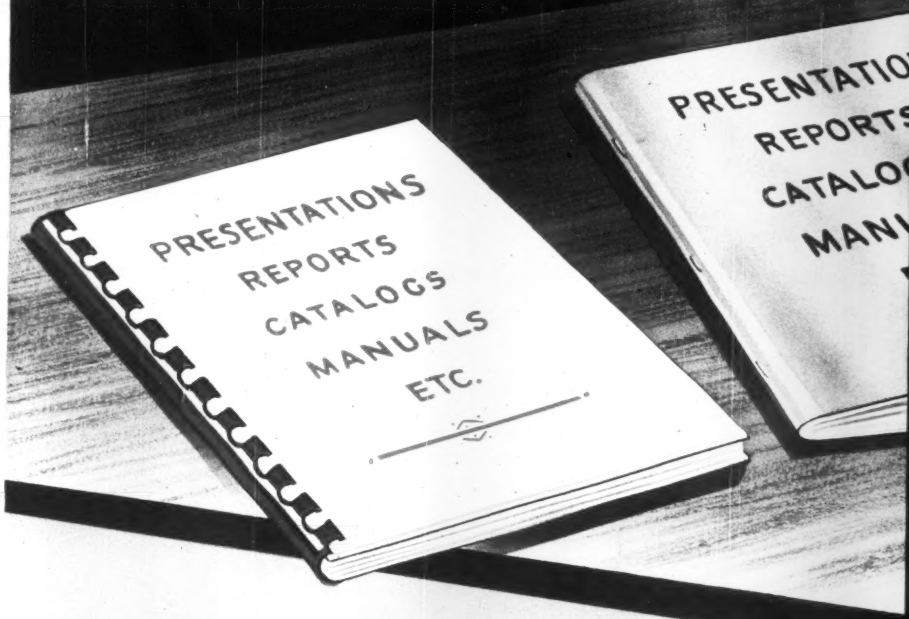
With this realization, the seeds of new trends in organizing paperwork are being planted.

Says Bob Walker, a Cleveland management consultant:

> A company's operations basically separate into four major systems. Starting with the order received, you have a sales system that begins with the receipt of the order, then follows through to the shipping of the order, the billing of the order, the collection of the money, the maintenance of your accounts receivable, and so on. You will find in this one system nine or ten different clerical groups who are actually in continuous communication with each other—but one is in the sales department, one in accounting, two or three in the controller's organization, and two in the shop. Organizationally, they aren't placed so that they can easily communicate with each other. Eventually, the barrier will have to be lowered. Then, in addition to the sales system, you have the production system, the material system, and the manpower system.

Today, the sales manager is an office manager. The controller is an office manager. The production manager is an office manager. But in the future we're bound to see the emergence of a top executive responsible for paperwork as it moves through these four basic systems. END

Which book would YOU read first?


PRESENTATIONS
REPORTS
CATALOGS
MANUALS
ETC.
PRESENTATIO
REPORTS
CATALO
MAN

businessmen read first, retain longest, books with colorful

PLASTIC BINDINGS

APECO Bindak™

Less than $3.50 per week can put an Apeco Bindak System in your office with Apeco's new lease or installment purchase plan.

new low cost way to plastic bind all your business literature right in your own office.

Now color and impressiveness can be added to your company literature. Everything from individual presentations to mass mailings can be plastic bound instantly, right in your own office with the new Apeco Bindak. Compact office plastic binding unit fits on the corner of any desk. Binds any book with just a pull of a handle. Pages lie flat, turn easily. Additional pages can be easily added and obsolete pages removed.

Have you read this new FREE BOOK? Tear out and mail this postage paid reply card.

Applications of
PLASTIC BINDING
in the modern office system

DR98B

Apeco Plastic Division
American Photocopy Equipment Company
2100 W. Dempster St., Evanston, Ill.

Please rush me without obligation, your new free book on the Apeco "Bindak" and the applications of plastic binding in the modern office. Also include free plastic bound date book.

Name

Title

Company Type of Bus.

Address

City Zone State

In Canada: APECO OF CANADA, LTD., 134 Park Lawn Rd., Toronto 14, Ont.
In Mexico: APECO DE MEXICO, S.A. Ignacio Esteva, 7 — Tacubaya 18, Mexico, D. F.

New! Office PLASTIC BINDING Unit

binds all business literature in choice of 12 colors for just pennies per book.

APECO
PROMOTIONS
REPOR
MANUAL
CATAL
ANNUAL
REVIEWS
PRESENTATION
ANALYSIS
Applications of
PLASTIC BINDING
in the modern office system

APECO Bindak

It's a vital selling tool for thousands of companies... and can be for you, too.

Find out how... send for new FREE BOOK

plus plastic bound memo and date book.

Free book explains in detail the many applications for Apeco Bindak Plastic Binding. Here is important information for every business man who wants to make his company's literature more impressive and to have it retained longer. Find out how plastic binding can create more impact and give you a competitive advantage. Mail postage-paid reply card for your free book today.

American Photocopy Equipment Co.
2100 W. Dempster Street, Evanston, Ill.

Printed in U.S.A.

FIRST CLASS
PERMIT NO. 226
EVANSTON, ILL.

BUSINESS REPLY CARD

No postage stamp necessary if mailed in the United States

5c postage will be paid by—

AMERICAN PHOTOCOPY EQUIPMENT CO.
2100 West Dempster Street
Evanston, Illinois

NEW SURVEY

continued from page 64

equipment company controller says, "We are installing a standard cost-accounting system to highlight deviations from planned performance and permit effectively directed control action."

As another indication of the pervasive changes taking place in many companies, the president of a transportation company remarks: "A detailed review is being made of our present reports and information flow. The purpose is to eliminate reports that are duplicated or really unnecessary, and to combine, simplify, and generally improve the data to be furnished. After decisions are reached as to the exact nature and urgency of the information wanted, we will consider the changes in equipment and procedures that will be necessary."

Throughout these companies, specific steps are being worked out to provide better information for top-level decision making. Most efforts involve taking on better office equipment, but many also include improved work methods.

About one-fourth of the surveyed companies indicate that they are taking a long, hard look at many of the reports produced in office operations and passed along to management. Says the vice president in one company, "We are eliminating reports that are merely 'interesting' but are not put to any specific purpose, and we are checking over other reports to cut out unnecessary details that slow down processing."

About a score of the reporting companies are now achieving economies by consolidating data processing functions that have been spread around various departments. In the past few years, 40 per cent of the surveyed companies have set up centralized accounting, and another 10 per cent plan to do so within the next year.

Companies are pruning away unprofitable office operations as they investigate the potentialities of the new office technology.

Spot the Waste Points in Your Office Set-Up

What really is wrong with your office? Why has the office not held up its end in the competitive race of recent years?

Here's a pinpointed checklist, based on expert opinion, of the commonest specific errors that companies are committing today in their office operations. Run down the list and see how many of these practices are still in evidence in your company.

☐ Use of clerical labor to hand-post

Folds faster than fingers!

Costs less than a standard typewriter!

Small folding jobs can be costly, take up more of a girl's time than is warranted—take her away from her regular and more important tasks.

A little PB folding machine can do all the office folding jobs much more quickly and accurately—save time and money — relieve your office people of these tedious chores.

This electric model FH, for example, with semi-automatic feed, can double-fold up to 80 standard letter sheets per minute! (Fully automatic feed at slight extra cost, is even faster.)

The FH can be easily set and used by anybody. It makes eight different folds, takes sheets from 3 by 3 to 8½ by 14 inches in most standard paper weights and finishes. And it also folds sheets stapled together.

Even used only occasionally, it will soon pay for itself. Ask the nearest PB office for a demonstration or send the coupon for free illustrated booklet.

New Combined Folder-Inserter

PB's Model 3300-FH folds and stuffs into envelopes 500 bills, letters, etc. in 8 minutes! The "3300" by itself hooks onto any PB folder, or can be used as an inserter alone.

PB PITNEY-BOWES Folding & Inserting Machines

Made by the originator of the postage meter . . . offices in 107 cities in U.S. and Canada.

The larger FM, fully automatic, can fold up to 19,000 sheets an hour.

Pitney-Bowes, Inc.
1508 Walnut St., Stamford, Conn.

Send free literature on:
☐ *Folding Machines* ☐ *Model 3300*

Name
Address

Filing Problems In Your Business?

Then get the new R-Kive File—lightweight, portable, with many uses in office and home. Either letter or legal size folders fit in this one file. Strong, corrugated fibre board with handy "tote" openings front, side and rear for easy handling. Read-at-a-glance index area. Attractive, fade-proof finish.

R-Kive FILE

2 for $2.60
Postpaid

Write For Additional Information

BANKERS BOX CO., Dept. DR-9
2607 North 25th Ave. Franklin Park, Ill.

Multiplex Presentation Panels

for
- Sales meetings
- Advertsing presentations
- Classrooms and libraries
- Retail display of flat goods

Multiplex steel-framed panels have thumbtack-board fillers; sizes from 18" x 21" to 48" x 96"; floor, wall, and table models; office furniture colors. Send for complete information.

MULTIPLEX DISPLAY FIXTURE CO.
939-949 North 10th St., St. Louis 1, Missour
Please send literature on Presentation Panels
....
....
....
....S-58

Savings Being Achieved in Office Operations

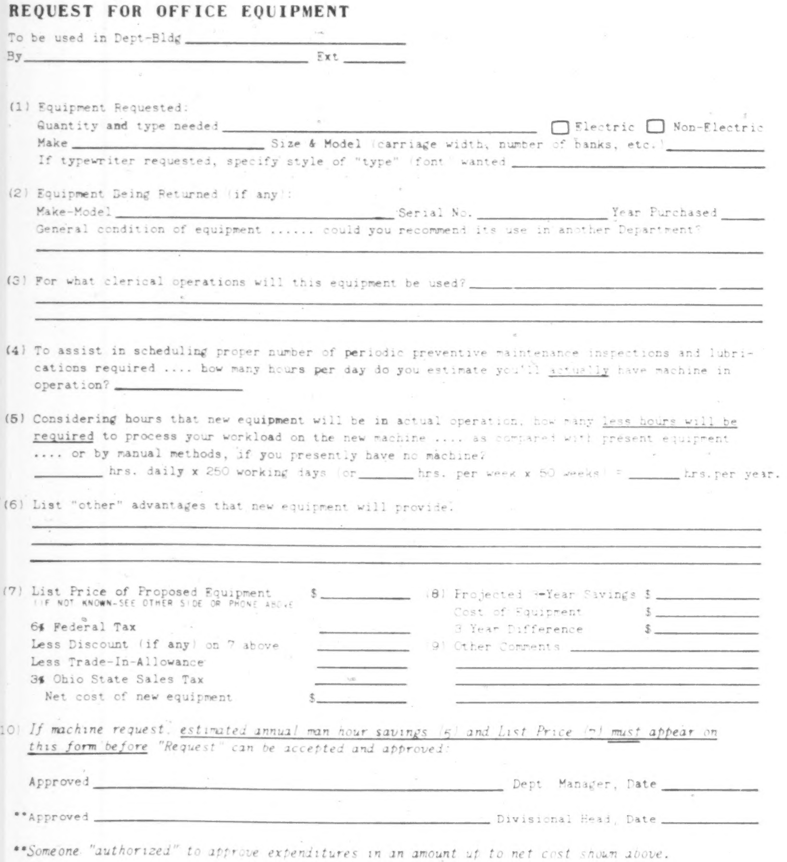
About half the manufacturers in DR&MI's survey were able to achieve dollar savings in their office operations last year. Savings were achieved by a variety of measures (see text for examples), including stepped-up mechanization, better methods, and improved layout. Insurance companies, much more deeply involved in paperwork, were able to come up with larger savings.

Here are the economies that are possible:

	Range of savings	Average savings	Average savings as percentage of total office expenses	Range of percentages of savings
Manufacturers, very large.......	\$10,000–\$350,000	\$100,000	4.2	1–17.5
Manufacturers, large............	\$5,000–\$329,000	\$ 47,500	5.0	1–33
Manufacturers, medium-size.....	\$5,000–\$375,000	\$ 13,000	5.0	1–30
Railroads......................	\$75,000–\$6,200,000	\$100,000	2.5	1–10
Insurance companies............	\$10,000–\$6,200,000	\$275,000	10.0	1–11

Justifying New Equipment Purchases

Here's the form used by B. F. Goodrich Company to make sure that newly purchased office machines will be put to good use.



REQUEST FOR OFFICE EQUIPMENT

To be used in Dept-Bldg ____________________
By ______________________________ Ext ________

(1) Equipment Requested:
Quantity and type needed ______________________ ☐ Electric ☐ Non-Electric
Make ____________ Size & Model (carriage width, number of banks, etc.) __________
If typewriter requested, specify style of "type" (font) wanted ______________

(2) Equipment Being Returned (if any):
Make-Model ________________ Serial No. __________ Year Purchased ______
General condition of equipment ...... could you recommend its use in another Department?
____

(3) For what clerical operations will this equipment be used? ______________
____
____

(4) To assist in scheduling proper number of periodic preventive maintenance inspections and lubrications required .... how many hours per day do you estimate you'll actually have machine in operation? __________

* (5) Considering hours that new equipment will be in actual operation, how many less hours will be required to process your workload on the new machine .... as compared with present equipment .... or by manual methods, if you presently have no machine?
______ hrs. daily x 250 working days (or ______ hrs. per week x 50 weeks) = ______ hrs.per year.

(6) List "other" advantages that new equipment will provide.
____
____
____

* (7) List Price of Proposed Equipment \$ __________
(IF NOT KNOWN-SEE OTHER SIDE OR PHONE ABOVE
* 6% Federal Tax __________
Less Discount (if any) on 7 above __________
Less Trade-In-Allowance __________
3% Ohio State Sales Tax __________
Net cost of new equipment \$__________

(8) Projected 3-Year Savings \$ __________
Cost of Equipment \$ __________
3 Year Difference \$ __________
(9) Other Comments ______________
____
____
____

* (10) *If machine request, estimated annual man hour savings (5) and List Price (7) must appear on this form before "Request" can be accepted and approved:*

Approved ____________________________ Dept Manager, Date __________

**Approved ____________________________ Divisional Head, Date __________

***Someone "authorized" to approve expenditures in an amount up to net cost shown above.*

information that could be done on electric office equipment.

☐ Allowing bad light and inefficient office layout to waste clerical manhours.

☐ Lack of coordination, planning, and cooperation among company departments.

☐ Duplication in the preparation, processing, and filing of similar reports in various departments.

☐ Too large a supervisory staff in relation to total workforce.

☐ Acquisition of new equipment without proper advance study of actual needs.

☐ Use of poorly conceived or inadequate standards for clerical work performance.

☐ Failure to set forth specific clerical responsibilities in job descriptions.

☐ Continued use of procedures originally designed for a smaller volume of business.

☐ Continued use of old reports when better statements have been designed, or preparation of reports that are interesting but not useful.

☐ Retention of filed material longer than needed.

☐ Letting machines remain idle through poor scheduling.

☐ Permitting supervisors to build unnecessarily large staffs in order to increase their own importance.

☐ Using more elaborate office equipment or machines than are actually required for the job being done.

☐ Recopying and reclassifying the same information for reports that vary in only minor details.

☐ Putting through piecemeal improvements without considering effect on systems as a whole.

☐ Failure to coordinate paperwork flow between departments.

☐ Failure to review office operations regularly to prevent unnecessary or unprofitable work.

☐ Failure to relate the cost of work performed to the result obtained, from the viewpoint of the effect on profits.

☐ Failure to centralize such services as mailing, reproduction processes, and stenographic pools.

☐ Lack of continuous programs for analysis of office procedures, forms, and records retention.

☐ Lack of proper coordination among clerks and other company departments.

☐ Exhaustive checks for accuracy that cost more than potential errors.

☐ Preparing reports that were conceived for a particular situation but which have since lost their purpose.

☐ Delegating responsibility for office operations without giving the manager the authority to carry out that responsibility effectively.

GOSH!

Only $195

for an office copy machine
...the all-automatic
DRI-STAT '200'

Here's the photocopyer you've been waiting for. Low in cost, high in efficiency, the new DRI-STAT '200' is the first truly automatic office copy machine priced under $350.

Look at these wonderful features:

- Will copy **anything**; if you can see it, the DRI-STAT '200' can copy it.
- Makes copies in normal room light; no hoods or subdued light necessary.
- Handsome stainless steel-aluminum construction; no plastic parts.
- Easy to operate; anyone can make perfect copies after a few minutes' instruction.
- Copies any original—opaque, translucent, transparent—up to 9" wide in any length.

AUTO-FEED, an exclusive, automatic paper feed is optional. Dri-Stat '200' with Auto-Feed is $245. Also available is the Dri-Stat '400' which copies materials up to 14" wide.

FREE ....

Ask for this informative, unbiased fact-folder, "Office Copy Machines and How to Choose the One to Suit Your Needs."

DRI STAT

PEERLESS

DRI-STAT DIVISION
Peerless Photo Products, Inc.
Shoreham, N. Y.

DR-1

☐ Please send me your FREE folder, "Office Copy Machines and How to Choose the One to Suit Your Needs."

☐ I'd like to see a FREE Demonstration.

Name________________ Title________

Company________________

Street________________

City________________ Zone______ State________

HIGH, LOW & LAST, INC.

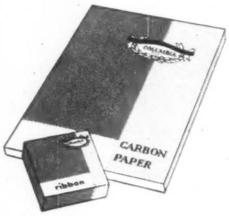
Bullish on Columbia Ribbons & Carbons

"On stock transactions no longer do we err,
Because copies three and four no longer blurr," said Low to High.

"I'm high on Low," said Last. "Ever since he teamed our business machines with Columbia Ribbons and Carbons!"

* Trade-mark reg. U. S. pat. off.

Columbia*
RIBBONS & CARBONS



COLUMBIA RIBBON & CARBON MANUFACTURING CO., INC., GLEN COVE, NEW YORK

THE OFFICE: A BETTER PLACE

continued from page 67

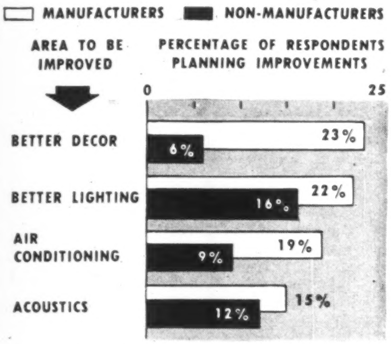
vey, top management is doing the major planning. And when planning is done at lower levels, both the initiative for office planning and the critical decisions (such as whether to buy wood or metal furniture) come from the top. The following table sums up some specific survey findings:

Planning responsibility	% of companies
Top management	23
Middle management	
Controllers	13
Office managers	24
Department heads	10
Special committees	
Planning committees	11
Planning department managers	10
Others	9

Of course, the lines and division of responsibility are not always clear-cut, since many departments and individuals frequently share the planning.

As the Wood Office Furniture Institute points out, many—if not most—offices function around a key or source document from which nearly all the other records are derived. In an insurance company, for example, the key document is the policy application. In many other fields, it is the customer's order.

OFFICE FACE-LIFTING PLANS FOR 1959



Avoid bottlenecks

Thus, the well-designed office will be laid out to channel the key documents and the papers derived from it safely, and swiftly. The work must flow as directly as possible, with no dams or leaks on the way.

Kenneth H. Ripnen, president of Kenneth Ripnen, Inc., office-building and office-layout planning architectural concern, says, "The office building, unlike the school, hospital, and place of worship, must have an interior that remains completely flexible so that normal expansion and contraction of office organizations can be accommodated without major alterations." Ripnen suggests that the office building of the future be

MODERN EXTERIOR *reflects streamlined inside efficiency of Steelcase, Inc.'s new plant and office building. Forty-acre site features a nearby airport and ample parking facilities.*

In a recently constructed building,
one company emphasizes . . . . .

Six Areas for Office Cost Cutting

IN ITS NEW quarter-mile-long factory and administration building in Grand Rapids, Mich., Steelcase, Inc., steel desk manufacturer, focused on six potential cost-saving areas that may serve as a management checklist for any office improvement program:

1. Lower maintenance. This is achieved by the use of vinyl asbestos floor tile, durable wall paint, and washable plastic-coated fabrics on wall surfaces susceptible to soil and abuse. Terrazzo flooring is used in the lobby, entrance areas, and stairways.

2. Increased flexibility. Steelcase has installed its own flexible furniture, which is composed of completely interchangeable parts, and which permits changes with little cost in labor time and parts.

3. Better space utilization. The company has provided more top surface and more under storage space. Each employee has an unobstructed view of the general office, and the receptionist, seated at a raised desk, is able to see the entire floor.

4. Correct lighting. To reduce worker eyestrain, 90-foot-candle illumination is provided for every work station. Luminous ceilings prevent intensive glare or dark spots.

5. Soundproofing. All potential noise-producing areas are sound-deadened. Baffled ceiling units in areas of high-noise potential also help to absorb sound.

6. Planned color. According to the company, the colorful furniture and decor reduce expensive employee turnover and attract new employees. Soft basic colors predominate in the offices, and "sky glare" is minimized by the low placement of windows.

Construction costs for the office area: $12.55 per square foot.

GENERAL OFFICE AREA *occupies 18,000 square feet of the total 50,000 square feet in the building. Different color schemes distinguish departments, raise employee morale.*

Visi-Shelf

can increase your
present filing capacity
by almost 200%!

OVER 4,000 VISI-SHELF INSTALLATIONS IN ALL PHASES OF AMERICAN BUSINESS SINCE ITS INTRODUCTION A FEW YEARS AGO!

America's First and Foremost Shelf Filing System with —

more
FILING CAPACITY— Visi-Shelf units are available with from 7 to 10 Openings High (or up to the ceiling if desired!)

more
RECORD PROTECTION — Patented, light weight Doors available on all Visi-Shelf units!

more
FILING PRODUCTION — Visi-Shelf's exclusive "Facile Guide Pull" provides more accurate filing, quicker reference!

Visi-Shelf
FILING SYSTEM

Write today for free catalog and name of nearest dealer.

VISI-SHELF FILE, INC.
225 Broadway, Dept. D-9
New York 7, N. Y.

How's your letterhead?

Get your free copy of our useful brochure *Letterhead Logic.* Then, turn to the check list used by experts to gauge letterhead effectiveness. See for yourself how your letterhead rates. If the tests show room for improvement, HILL's 44 years of specialized experience is at your disposal.

Learn how HILL craftsmanship can create for you a letterhead you'll be proud of . . . one that truly reflects the character, personality and prestige of your firm . . . a scientifically designed letterhead with built-in sales appeal . . . and at prices much lower than you'd expect.

If you use 5,000 or more letterheads a year, write today for your free *Letterhead Logic.* Just tell us how many letterheads you use a year and please send a sample of your present letterhead.

If it's worth seeing, put it on a Hill

R. O. H. HILL, INC.
270 (D-0126) Lafayette Street
New York 12, New York

Attached is a sample of our Letterhead. We use________per year. Please send me my free copy of Letterhead Logic.

NAME________
COMPANY________
ADDRESS________
CITY________ ZONE________
STATE________

Fine Letterheads and Business Cards Since 1914

Wilson & Co., Chicago, Ill.

Do Your Storage Files "Stack Up" To

STAXONSTEEL

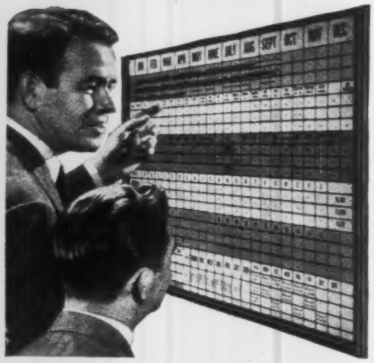
TRANSFER FILES?

You too can save money, valuable floor space and increase record storage efficiency with a STAXONSTEEL installation. This unique file builds its own steel framework as you stack them to any height, side by side, conserving all space. Sturdy fibre-board files with steel framework, modern metal drawer pulls, attractive Bankers Gray fade-proof finish—your best solution to record storage problems. In five stock sizes: Legal Letter, Check, Tab Card and Freight Bill.

2 for $10.70
LETTER SIZE
PREPAID
Slightly Higher in the West

Write for Additional Information
BANKERS BOX CO. Dept. DR-91
2605 North 25th Ave., Franklin Park, Ill.

How To Get Things Done Better And Faster



BOARDMASTER VISUAL CONTROL

- ☆ Gives Graphic Picture—Saves Time, Saves Money, Prevents Errors
- ☆ Simple to operate — Type or Write on Cards, Snap in Grooves
- ☆ Ideal for Production, Traffic, Inventory, Scheduling, Sales, Etc.
- ☆ Made of Metal. Compact and Attractive. Over 250,000 in use.

Full price $49.50 with cards

FREE 24-PAGE BOOKLET NO. D-200 Without Obligation

Write for Your Copy Today
GRAPHIC SYSTEMS
55 West 42nd Street • New York 36, N. Y.

WITH FLUORESCENT LAMPS, *higher lighting levels can be achieved without adding to the heat problem. This office is lighted to a level ten times as bright as the average office.*

Office Lighting: More Brightness at Lower Cost

"LIGHTING LEVELS in use tend to double about every ten to fifteen years," General Electric's Will Fisher told DR&MI at a recent round-table conference. "Although 50-foot-candle installations were common a decade and a half ago, I think we are in the 100-foot-candle era now."

The trend toward continually higher light levels has, in part, been made possible by fluorescent lamps, introduced on the market twenty years ago. Since then, the rated burning life of the 40-watt fluorescent lamp has been raised from 2,000 to 7,500 hours, and top efficiency has increased from 47 lumens to 67 lumens (units of light produced), while the price has dropped from $2.80 to $1.20. As a result, reports GE, the user gets twenty times as much light for his money as he did in 1939.

Increasingly, office lighting is being used to decorate as well as illuminate. According to G. J. Gillen, chairman of Edison Electric Institute's commercial lighting committee, "Walls, furniture, even Venetian blind colors may be chosen to complement and enhance it."

Another authority, G. Luss, vice president and design director for Designs for Business, Inc., foresees a continuing trend to increased light from less visible sources in systems which can be automatically adjusted for each individual at his own work station.

ACCOUNTING OFFICE *of Edison Electric Institute's new offices in New York City makes maximum use of lighting to decorate as well as illuminate. Wall colors help.*

GLARE-PROOF ILLUMINATION *is assisted by sound-absorbing baffles in tellers' section of remodeled Franklin Society Federal Savings & Loan Association in New York.*

constructed in "auditorium-type" design, in which lighting, air conditioning, window modules, and column spans have no direct influence on the modular furniture, partitions, or functional modules.

According to Jules and Nathaniel Becker, partners of Becker & Becker Associates, industrial designers, "Space utilization requires intelligent analysis and handling of relationships—people to people, as well as people to paper or tools."

Furnishing the office

Furniture manufacturers are giving the plant office a lift with colorful and specially designed modular furniture: steel desks, table tops, end panels, credenzas, drawers, storage cabinets, filing units, and other components.

"To be truly outstanding," says Don W. McClure, vice president of the General Fireproofing Company in Youngstown, Ohio, "office furniture must combine two basic ingredients—function and design." His company has been working in conjunction with Reynolds Metals since 1956 on a new line of metal office furniture. The company states it is the only manufacturer now engaged in two-toned color anodizing of aluminum on a production-line basis.

Currently, work surfaces are breaking away from their traditional oblong shapes. Aside from the fairly common L-shapes that came in with modularity, desks are available in many geometric designs—including a pentagon-shaped desk for conferences. More common, too, are desks with increased storage facilities to keep the tops cleared for action and all work tools and papers orderly and ready for use.

News in walls

Walls and partitions are not only being designed for greater flexibility, they are also being made of new materials and compositions. According to Pittsburgh Corning Corp., glass blocks are now being used in patterns with ceramic tile inserts to provide what it terms a "tapestry of light" effect.

Clear glass is also being used for walls. In its new electronics plant in suburban Milwaukee, Wis., the Square D Company has a glass wall running the full length of the office.

Radiant heat curtain walls are another possibility for the office. One producer, Bettinger Corp. of Waltham, Mass., states that they not only make possible better heat and humidity control and quicker and more uniform heat, but if used in new office construction can reduce initial cost by at least 25 per cent.

While frankly designed to promote the sale of specific products, some trade groups are making useful contributions to better office design. The Executive

OXFORD PENDAFLEX®
Hanging Folders make top and bottom drawer filing easy!

It takes a lot of digging to get at old style filing folders, jumbled in the difficult top and bottom drawers.

But when folders are Oxford Pendaflex, file clerks have no trouble.

These remarkable hanging-sliding folders publish their identity, and offer their contents instantly in *any* drawer.

File clerks can forget follower blocks, two-handed opening of working space, shoving papers down into place. The time and effort saved results in lower payroll cost, an end to most misfiling, and a records department geared for service rather than delay.

Oxford Filing Supply Company, Inc.
Garden City, New York

Oxford
FIRST NAME IN FILING

OXFORD FILING SUPPLY COMPANY, INC.
2-9 Clinton Road, Garden City, N. Y.

Please send free "File Analysis Sheet" and Oxford Pendaflex Catalog.

NAME
FIRM
STREET
CITY STATE

Put efficiency at your fingertips

MORRIS SAFE-T-SET
Smoothest writing pen and ink set. Can't leak or spill. Holds 2 full oz., easy to fill.

MORRIS MEMO HOLDERS
Keeps memos neat and handy. With or without ball point pen attached.

MORRISHARP ELECTRIC PENCIL SHARPENER
Starts automatically. Stops cutting when pencil is perfectly sharpened. Med., fine, ex. fine points.

MORRIS ASH TRAY
Big, sales-meeting size, with removable glass liner. Matches modern office decor.

MORRIS PHONE REST
Frees both hands. Easily attached and adjusted. Fits all phones—either shoulder.

MORRIS TRAYS—LETTER & LEGAL
Rear suspension gives easy access. Stack to any desired height.

Ask your stationer for these
MODERN DESK TOP ACCESSORIES
by

BERT M. MORRIS CO.

Dept. A, 8651 WEST THIRD STREET, LOS ANGELES 48, CALIF.

WRITE FOR FREE CATALOG. Write today for the Bert M. Morris Co. 1958 catalog of modern desk top equipment. You will find it a big help in your office planning.

Furniture Guild—an organization of furniture makers, designers, and dealers—believes that furniture and color schemes are frequently an irritant. "Some offices," says the Guild's director, George W. Reinoehl, "are so drab, a business man can do absolutely nothing all day and still go home tired."

Conditioning for comfort

In a Minneapolis-Honeywell Regulator study of air conditioning costs, in which the Carrier Corp. assisted, it was found that the annual per-square-foot cost of owning and operating an air conditioning system was 56 cents for a new office building and 68 cents for an existing building. While no scientific studies are available to indicate how much worker efficiency and productivity increased after the installation of air conditioning, Minneapolis-Honeywell Vice President John E. Haines cites two instances where the increase has been substantial:

- John Hardy & Son, nylon hosiery manufacturers in Pulaski, Tenn., reported a 29 per cent increase in production after installing air conditioning. And knitting machine maintenance costs dropped 80 per cent.
- Detroit Edison Company found that 5,008 manhours were needed for 8,988 work units, prior to the installation of air conditioning in its drafting room. After installation, 10,474 work units took 3,872 manhours—a 51 per cent increase in efficiency.

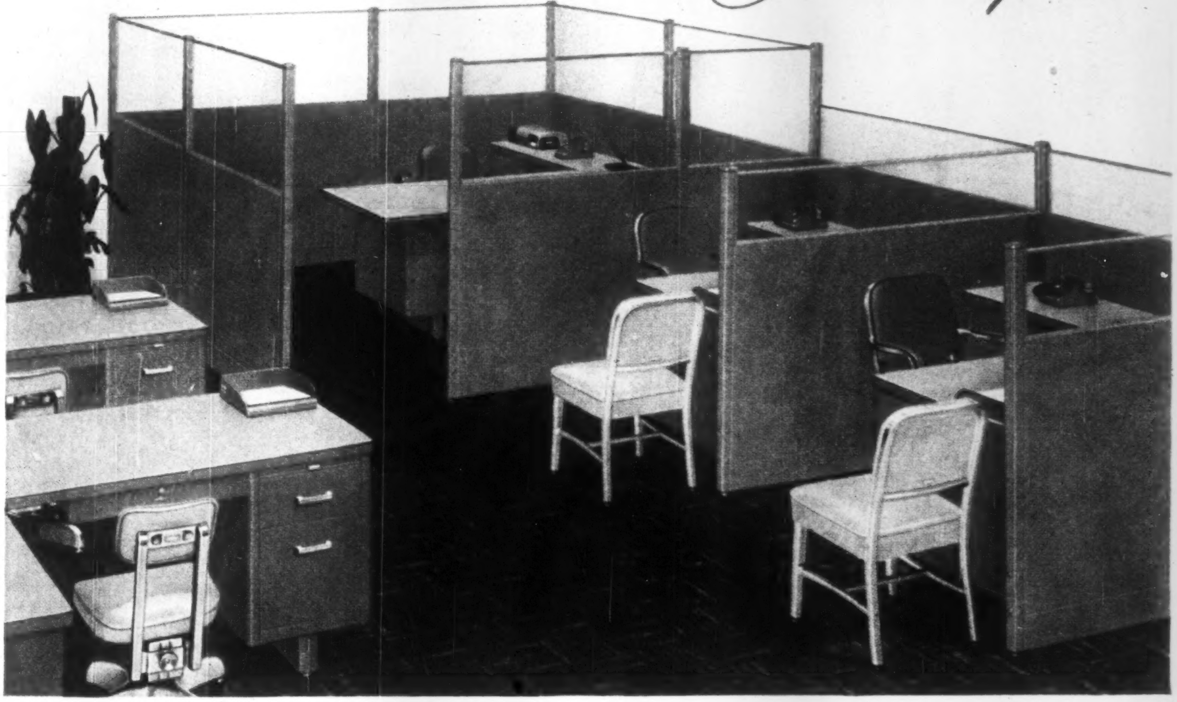
The experts speak up

To sum up some of the more recent and important trends in the improvement of the office environment, here is a sampling of views given DR&MI by participants in two round-table conferences held in Cleveland and New York:

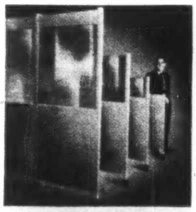
- "Machines affect a group of employees in an office, but the environment—the furniture, the chairs they sit in, and the desks they work at—affects everybody. And that environment and the work tools provided make a great difference in what you get out of people," says Cliff Boyce of Steelcase, Inc.

  "One of the things that we stress frequently to our customers," he adds, "is that you can move into an office or remodel it today, and a month or a year from now you are going to run into situations that require changes. You have got to have equipment that is flexible to meet those changes, such as movable walls or flexible furniture."
- "The use of glass was held back in many office buildings for years because management insisted on privacy. Glass does not give you sound control, but if you put clear glass in an office so that the people outside can see who is inside, and the people inside can look outside

Increase your office-productivity *Overnight*

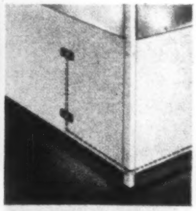


Globe-Wernicke Techniplan Partitions magically create efficient, attractive private and semi-private offices, a proven technique for increasing employee work output. Techniplan Partitions are space-engineered, modular metal units. They can be installed *overnight* with ordinary tools. No alteration of your lighting, air conditioning or other existing facilities is necessary. Free-standing Techniplan Partitions can just as easily and quickly be re-arranged to suit changing requirements. They are never obsolete. There is no simpler, faster or more economical way to increase your office productivity than installing Globe-Wernicke Techniplan Partitions. Their tremendous acceptance is endorsed by the thousands of installations in every type of business. Why not call the G/W dealer* in your city today? He will be happy to demonstrate the many outstanding features, a few of which are illustrated below, of Techniplan Partitions — or write for complete information to Dept. C-9.

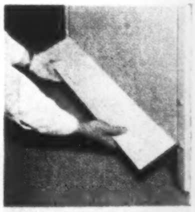


Techniplan partitions, available in 8 widths, 4 heights—up to 84", interlock to form free-standing sections.

Techniplan metal partitions are available with glass (transparent or translucent), metal or acoustical panels.



Techniplan panels and posts have provisions for concealed wiring and electrical outlets and switches.



Techniplan partitions have open base; can be converted to closed base with snap-in, snap-out base panels.

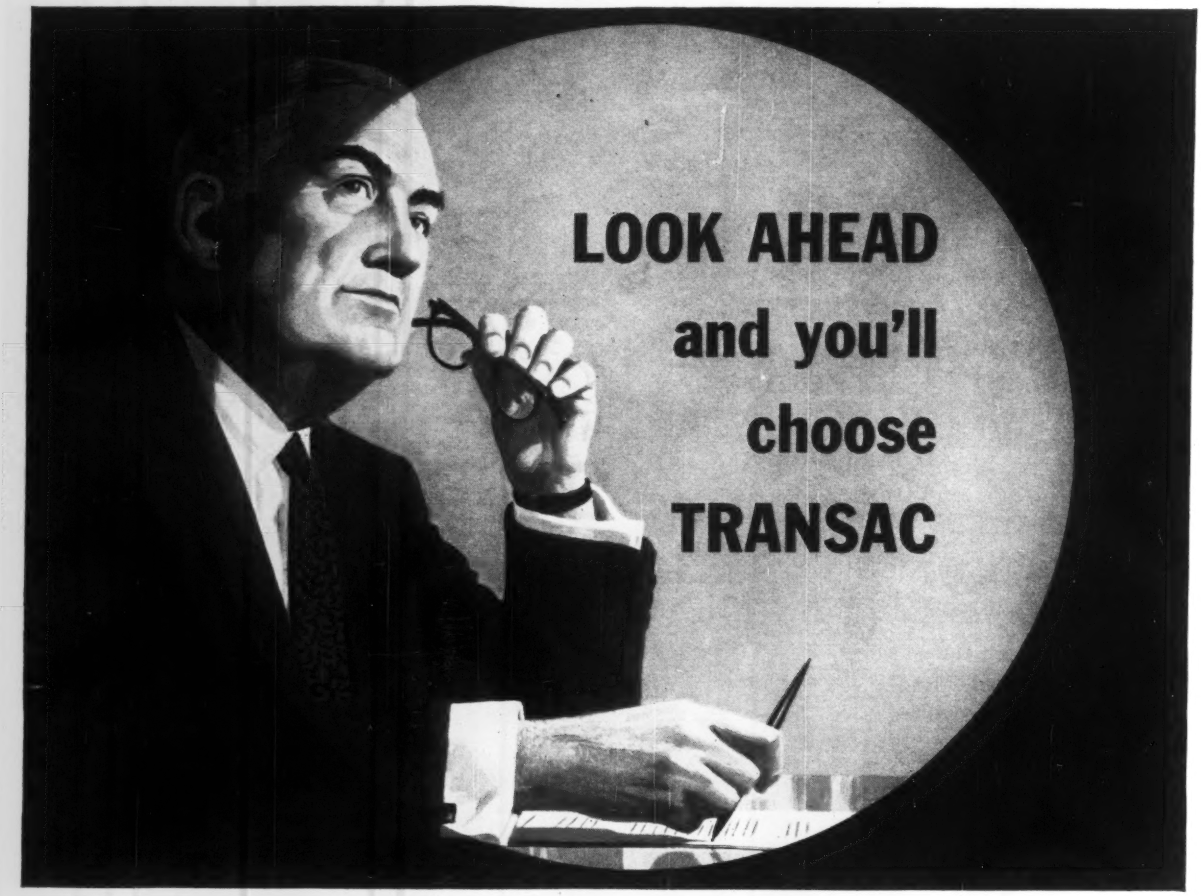
Globe-Wernicke
makes business
a pleasure

GLOBE-WERNICKE ®

THE GLOBE-WERNICKE CO. • CINCINNATI 12, OHIO

* Dealers listed in Yellow Pages under "Office Furniture"

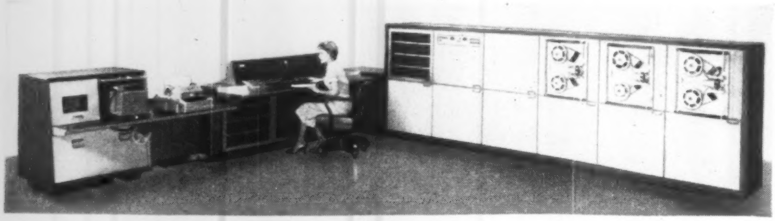
When you select *your* computer…



Philco *transac** S-2000 available now

Transac is the world's fastest commercially available large-scale data processing system. Here is speed to solve the most difficult problems . . . many times faster than any other system on the market. And greater speed means greater capacity.

Before you decide on *your* data processing system, look into Transac S-2000. You'll discover that only Transac gives you all-transistor reliability; occupies much less valuable floor space than conventional systems; requires no expensive site preparation nor special air conditioning; lowest power consumption; least weight; it's movable; AND, TRANSAC IS AVAILABLE NOW, on sale or rental plans.



- World's Fastest Data Processing System
- All-Transistor—Most Reliable Scientific and Business Computer
- 3 to 5 Times The Capacity At No Extra Cost—the Lowest Cost for your Computation Dollar!

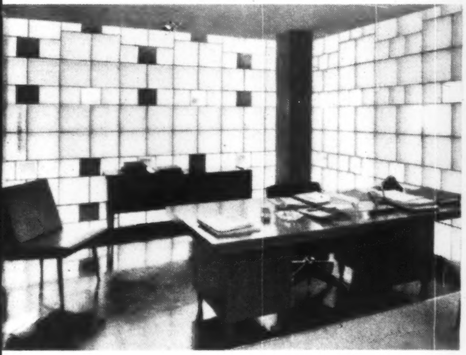
Investigate the excellent and unusual opportunities at Philco for computer engineers.

PHILCO®
GOVERNMENT
& INDUSTRIAL DIVISION
4706 Wissahickon Avenue
Philadelphia 44, Pennsylvania

*"TRANSAC"—TRADEMARK OF PHILCO CORPORATION FOR TRANSISTOR AUTOMATIC COMPUTER.

and see what is going on, everyone is a lot less interested in what is being said in there," says Hugh Beckwith, E. F. Hauserman Company.

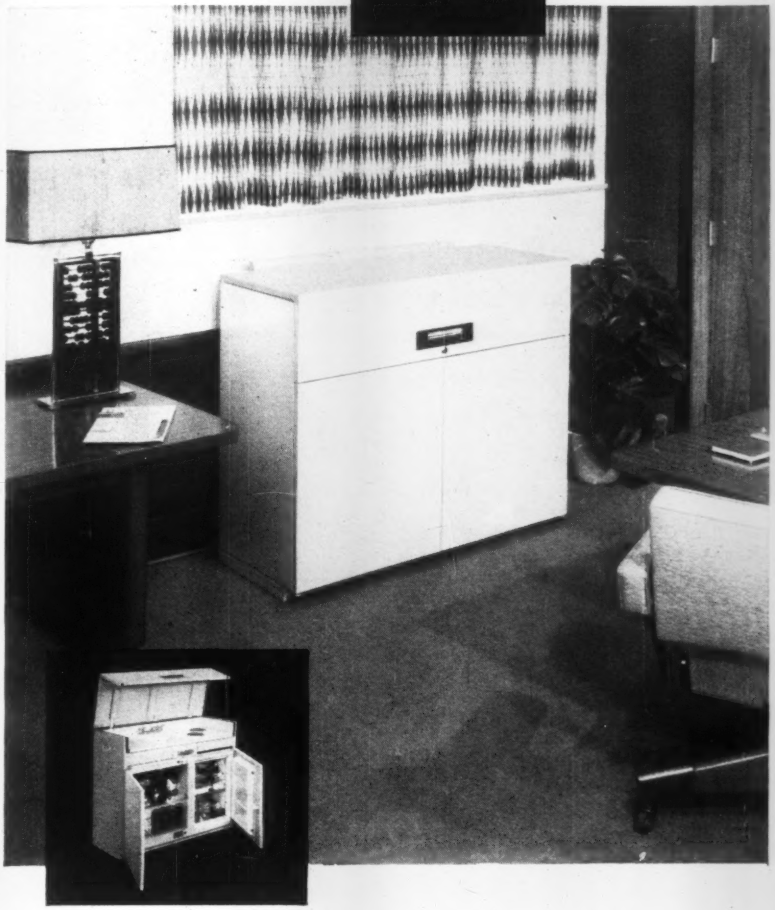
- "We are in the beginning of the era of prefabrication, greatly hastened by the acceptance of the curtain wall," according to Beckwith. "The products that are available for interior walls are substantially better than they were five or ten years ago. The cost of on-site labor is becoming such a substantial factor that people are trying to find ways to get it done in the factory rather than on the site. And the maintenance of any cinderblock or plaster wall is substantially higher over the years than the maintenance of a prefabricated product which has a baked enamel finish that is easily kept. A movable wall can give management three things: (1) it can cut maintenance costs, which will improve profits; (2) it can give the employee an adequate and satisfactory environment; and (3) the wall can change when needs change, as they inevitably will."
- "The fundamental factor in deciding or measuring whether an organization, an office, or any group is successful, is communications," says Robert Gad, director, Space Planning Division, Shaw Walker Company. "By and large, we have failed to develop the facilities for good communications at the lower level. One indication of this is unnecessary walls, unnecessary partitions, unnecessary divisions in an organization. I believe that most of the failures in company communications, the lack of information exchange, are due to the continuing of compartmentation that tradition has demanded of the office."



CURTAIN WALLS *of vari-sized glass blocks, mixed with ceramic tile inserts, give a "tapestry of light" effect and diffuse light evenly throughout the office working area.*

Like the American home, the office is trending toward casualness and increased comfort, a place that by its basic design discourages slipshod or autocratic management and encourages productivity. —K.H.

compact kitchens by **Dwyer**



Kitchen for the office

Anything from a jigger of carrot juice to Welsh rarebit for eight can be quickly prepared right in your office. Dwyer units like the "400" shown above provide for every culinary need—electric range, sink, refrigerator (plenty of ice cubes) and food storage—all neatly encased in a modern furniture unit.

Hundreds of companies like yours have installed Dwyer kitchens in offices and employee rooms. For entertaining customers . . . conferencing thru the noon hour . . . coffee breaks or perhaps night shift meals. *The payoff* in customer or employee relations makes you wonder why you didn't get a Dwyer long before!

FREE CATALOG gives you full particulars on economical space-saving units for the factory as well as the "400" for offices as illustrated. Models for apartments and hotels, too. Sizes from 39" width to 69". Electric or gas. Mail coupon today.

Dwyer Products Corporation
Dept. H-2509, Michigan City, Indiana

Please send new catalog on Dwyer compact kitchens.

Name____________________

Address____________________

City, State____________________

CO
COMMODITY
WORKS
MILL UNIT
CODE
MONTH
REF CODE
CUMULATIVE YIELD
BUDGET
ACTUAL
MATERIAL CHARGED
PROCESS YIELD
WORKS OPERATING
PRODUCTION COST

H. J. Haughton, Vice President and Controller, Jones & Laughlin Steel Corp.

"Moore forms help us keep tab on costs"

CONTROL GIVES JONES & LAUGHLIN PINPOINT ACCURACY IN BUDGETING

To keep its customers, a steel company has to watch its costs. A new 'costing system' helps Jones & Laughlin Steel Corp. make accurate forecasts of its costs, for planning and control.

This calls for fast action in collecting costs at their source. Punched cards record vital statistics — many thousands of them — in supply, service, maintenance, wages, etc. An IBM 650 computes totals. They show on a Commodity Cost Sheet, a Moore continuous form. It is J & L's control in print.

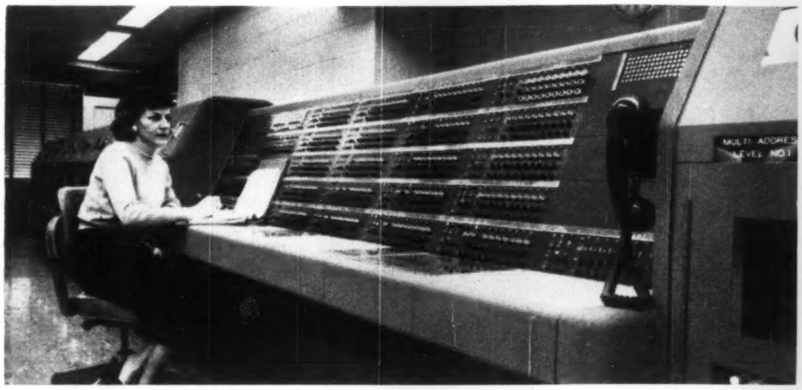
The system speeds up planning, with room for correction when needed. Big decisions are based on fresh facts; little ones become automatic. Helpful yardsticks measure results in all theaters of cost.

Moore's Automated Data Processing (ADP) can solve problems for the small business, too. And it doesn't have to be costly. Whether it's an entire system or a few procedures, the Moore man can help plan the control you need. He's listed in the telephone directory — or write the Moore office nearest you.

Moore Business Forms, Inc., Niagara Falls, N. Y.; Denton, Texas; Emeryville, Calif. *Over 300 offices and factories across U. S., Canada, Mexico, Caribbean, Central America.*

Build control with

MOORE BUSINESS FORMS



AS MANY AS *10,000 orders a day can be handled through Republic Steel's new communications center that cuts order-processing time, from sales office to mill to one day.*

Getting Down to Cases

Here are details on the profit results that companies are now achieving with the imaginative use of new equipment.

Speeding Up Steel Orders

To keep customers happy by turning incoming orders into outgoing shipments as quickly as possible, many companies are gearing their communications to the new equipment developed in the past few years. One of the most outstanding of the new developments is the order-processing system completed recently at a cost of $1 million by Republic Steel Corp. ($1.2 billion sales).

Norman W. Foy, Republic Steel's vice president of sales, describes the new plan as the "fastest and most efficient system for handling customer orders and inquiries in any steel company." It has involved a considerable updating of the company's Teletype network (installed in 1937 and first of its kind in the steel industry) to link eight basic steel plants and key fabricating plants to district sales offices and the general office in Cleveland.

Now the Teletypewriters are activated by punched-paper tape, and a detailed and complete mill order form can be placed in the mill the day it is received at a district sales office anywhere in the nation. Previously, it frequently took a week to get the order into scheduling at a mill.

The new system links district sales offices to three centrally located "service" centers—in Cleveland, Chicago, and Massillon, Ohio—where customers' inquiries are answered and incoming orders processed and scheduled to particular producing mills. Each center handles different product groups.

In each service center, order-processers work together, clearing orders and assigning each to the mill that can fill it in the shortest time. Each team includes a metallurgist, a sales-order expert, and a mill-schedule specialist, and with this pool of technical knowledge quick decisions on incoming orders can be made.

The detailed scheduling situation at each mill is consolidated into a total picture at each service center. However, such centralization in order handling calls for the very latest equipment.

Added to the original Teletype network, which was expanded and made to provide automatic switching, were Teletype machines with special keyboards to allow the duplication of the mill order form, shipping schedules, shipping notices, control records, and invoices. The key to the system is the ability of the machines both to read and to generate punched-paper tape which can activate a battery of equipment from billers to computers.

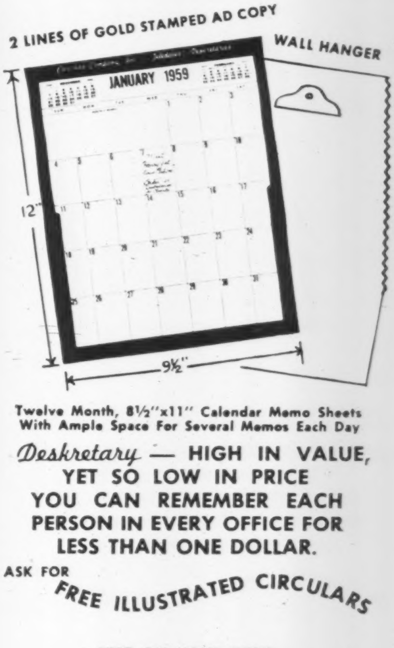
When the order is first written at the sales offices, a tape is produced by the transmitting machine that sends the order to the service center. (This tape is stored for future use should the customer reorder the same item.) When the machine at the service center receives the order, another tape is pro-

GIVE EACH CUSTOMER
A Personal Secretary*

**Deskretary*
The good will gift
that keeps memos everyday
each week for a full month.

IN SIGHT – IN MIND

A "TOP-OF-THE-DESK-GIFT"
You'll Be Proud To Give.
Luxuriously Book-Bound—
- Looks Like Leather
- Feels Like Leather



Twelve Month, 8½"x11" Calendar Memo Sheets
With Ample Space For Several Memos Each Day

Deskretary — HIGH IN VALUE,
YET SO LOW IN PRICE
YOU CAN REMEMBER EACH
PERSON IN EVERY OFFICE FOR
LESS THAN ONE DOLLAR.

ASK FOR
FREE ILLUSTRATED CIRCULARS

TEST ON YOUR DESK
SAMPLE PERSONALIZED WITH
YOUR OWN NAME
One Dollar Postpaid (Refundable)

Quantity	25	50	100	200	300	500
Price	75c	70c	65c	62c	60c	55c

CARCROSS COMPANY, INC.
8 SECOND STREET – TAUNTON, MASS.

HOW
Empire Terminal Warehouse
Dallas, Texas
ELIMINATED
ADDRESSING
BOTTLENECK
OF MULTIPLE SHIPMENTS

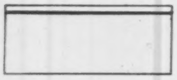
STEN·C·LABLS* TYPED ON ROYAL ROBOMASTER INCREASE SHIPPING ROOM EFFICIENCY 50%

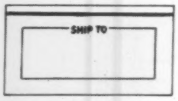
Operator typing bills of lading on "master" machine with continuous form Sten-C-Labl in "second" machine.
Imprinting direct to PANL-LABL on carton with Sten-C-Labl Applicator.

Addressing continuous form Sten-C-Labls as a by-product of typing bills of lading at Empire Terminal Warehouse, has stepped up efficiency 50% in their shipping room operation. Costly errors are reduced because address is typed only once. Time-consuming filing of cut-out stencil boards is eliminated. Each Sten-C-Labl is used with simple applicator to imprint as many labels, tags or direct to carton as shipment requires . . . then it is thrown away.

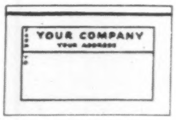
THERE'S A STEN·C·LABL* TO FIT EVERY MULTIPLE SHIPPING NEED

These three basic styles are available in a large number of different sizes as well as in continuous forms for separate writing.


Blank STEN-C-LABL to imprint on gummed labels, tags or PANL-LABLS.



Stock "Ship To" STEN-C-LABLS direct to carton—no gummed labels.



Special die-impressed STEN-C-LABL includes your name and address—direct to carton.

5 MINUTES OF YOUR TIME in checking your multiple shipping procedures may save you thousands of dollars.

STEN·C·LABL, Inc.
DR-9, 1821 University Avenue, St. Paul 4, Minn.
Please send me FREE Brochure on saving with STEN-C-LABLS

Name__________
Company__________
Address__________
City__________ State__________

MAIL TODAY!

*Registered U.S. Pat. Off. The term STEN-C-LABL is the trademark and exclusive property of STEN-C-LABL, Inc. All STEN-C-LABLS are manufactured exclusively by STEN-C-LABL, Inc., St. Paul, Minn. under U.S. Pat. No. 2,771,026. Other patents pending.

duced along with a paper copy of the order form. This second tape is used to transmit the order to the proper mill, where a third tape is produced and used to write shipping papers and, eventually, the customer's invoice.

A master tape for a regular customer contains credit and traffic routing information. This makes it possible to simplify routines in these departments.

Since various types of equipment are activated by the paper tape, the company avoids the errors that might creep in with constant copying of order information by clerks in sales, order processing, scheduling, shipping, and accounts receivable. In addition, duplication of work is avoided, and various special analyses of sales information can be quickly produced for management decision making.

The streamlining provided by the new system has resulted in a single new basic form for sales, order, and billing functions. This has replaced 33 different forms in use until a few months ago.

Edwin C. Mausz, who headed a company committee that researched and installed the new system, says, "A major job was to integrate the new system into our operations without disrupting normal service." This required a major educational program for employees, including many training classes and new operating manuals.

Automated Routines in Purchasing

How integrated data processing can cut paperwork costs while speeding information along more accurately is demonstrated at the Clark Equipment Company, Buchanan, Mich. ($143 million sales). The improved system is centered around the purchasing department—an operating area generally neglected so far in industry's efforts to take advantage of IDP. (Most IDP has been applied to order-processing and invoicing routines.)

The new system uses punched-paper tape, punched cards, and automatic equipment to ease the increased workload (Clark's volume has nearly doubled in the past few years). John G. Mack, vice president in charge of purchasing, says that a few months after installation the company was able to:

- Reduce errors inherent in the manual handling of data.
- Obtain information on the status of orders and shipments much faster.
- Expand the volume of purchasing work accomplished with little increase in the clerical staff.
- Obtain more easily data needed for production control and cost accounting.

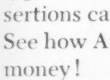
To see how the new system now

It used to play music . . . now it writes your letters!

Auto-typist record "memory" roll operates the typewriter to write personalized letters . . . by automation!

Remember the player piano and how it played music as if by magic? It was the *roll* with its perforations that played the notes. Similarly, Auto-typist's paper record "memory" roll . . . heart of the Auto-typist . . . "plays" the keys on the typewriter to write your letters . . . automatically and accurately! Auto-typist eliminates routine typing and dictation, and is the answer to any volume repetitive correspondence problem.

Auto-typist can be used with any standard model typewriter, and one person can produce 100 to 125 letters a day . . . 3 to 4 times normal manual typing output! And, it's so simple . . . precomposed numbered letters or paragraphs are perforated on the paper record memory roll, which will store up to 250 lines of copy. Letters or paragraphs are numbered to correspond to push-buttons, then Auto-typist automatically picks them out and types them perfectly! Manual insertions can be made at any time. See how Auto-typist can save you money!



Auto-typist

American Automatic Typewriter Co.
Dept. 49
2323 N. Pulaski Road, Chicago 39, Illinois
Gentlemen:
Please send me full information about Auto-typist and free booklet, "60 Best Business Letters."

Name ____________________

Company and Title ____________________

Address ____________________

City ____________ Zone ______ State ____________

60
Best
Business
Letters

Send coupon for full information, and get your free copy of the new booklet, "60 Best Business Letters" to help you with your correspondence. Covers all types of business.

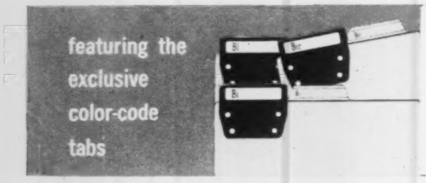
AMERICAN AUTOMATIC TYPEWRITER COMPANY • 2323 NORTH PULASKI ROAD • CHICAGO 39, ILLINOIS
MANUFACTURERS OF AUTO-TYPIST, COPY-TYPIST AND CABLE-TYPIST

the difference is often...

VARIADEX®
ALPHABETIC FILING SYSTEM

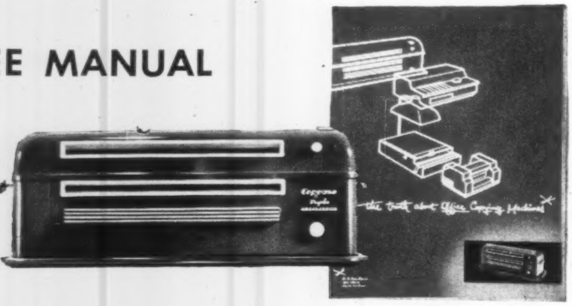
The never-failing truly efficient filing system!

"I can't find it" or "here it is"? One of the minor irritations in business is having to wait while the search is on for a file you need *now!* This can't happen with the VARIADEX filing system. Finding is *immediate*, thanks to its scientifically designed color-code tabs. It's economical too because it offers *unlimited file expansion* without the costly waste of discarded indexes or laborious re-indexing. Write for details!



Remington Rand
Division of SPERRY RAND CORPORATION
Room 1960, 315 Fourth Ave., New York 10
Kindly send free booklet LBV802—"*Variadex*".
NAME & TITLE__________
COMPANY__________
STREET__________
CITY______ ZONE___ STATE______

FREE MANUAL



the truth about Office Copying Machines

1. What copy limitations, if any, does each type of machine have? • 2. Is it important to copy everything? • 3. Which machine will produce my copies at lowest cost? • 4. Can anyone operate it? • 5. Which machine is the fastest for general office copying?

The manual contains a test pattern which gives a true evaluation of all copying machines. Try the test pattern on your present copying machine. Then try it on Copease. See the difference: COPEASE COPIES EVERYTHING. Send for "THE TRUTH ABOUT OFFICE COPYING MACHINES" today:

Distributors in Principal Cities. Regional Offices:

New York, 425 Park Ave. PLaza 3-6692

Chicago, 228 N. LaSalle St. STate 2-1383

Los Angeles, 3671 W. Sixth St., DUnkirk 5-2881

COPEASE CORPORATION Box 06
425 Park Avenue, New York 22, N. Y.

Gentlemen: Please send me a FREE copy of "THE TRUTH ABOUT COPYING MACHINES"....☐ I would like to have a 3-day FREE trial of Copease in our own office—without obligation....☐

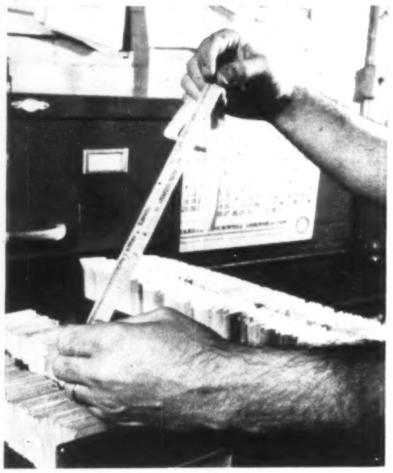
NAME........................POSITION....................
ADDRESS..
CITY........................ZONE....STATE..............

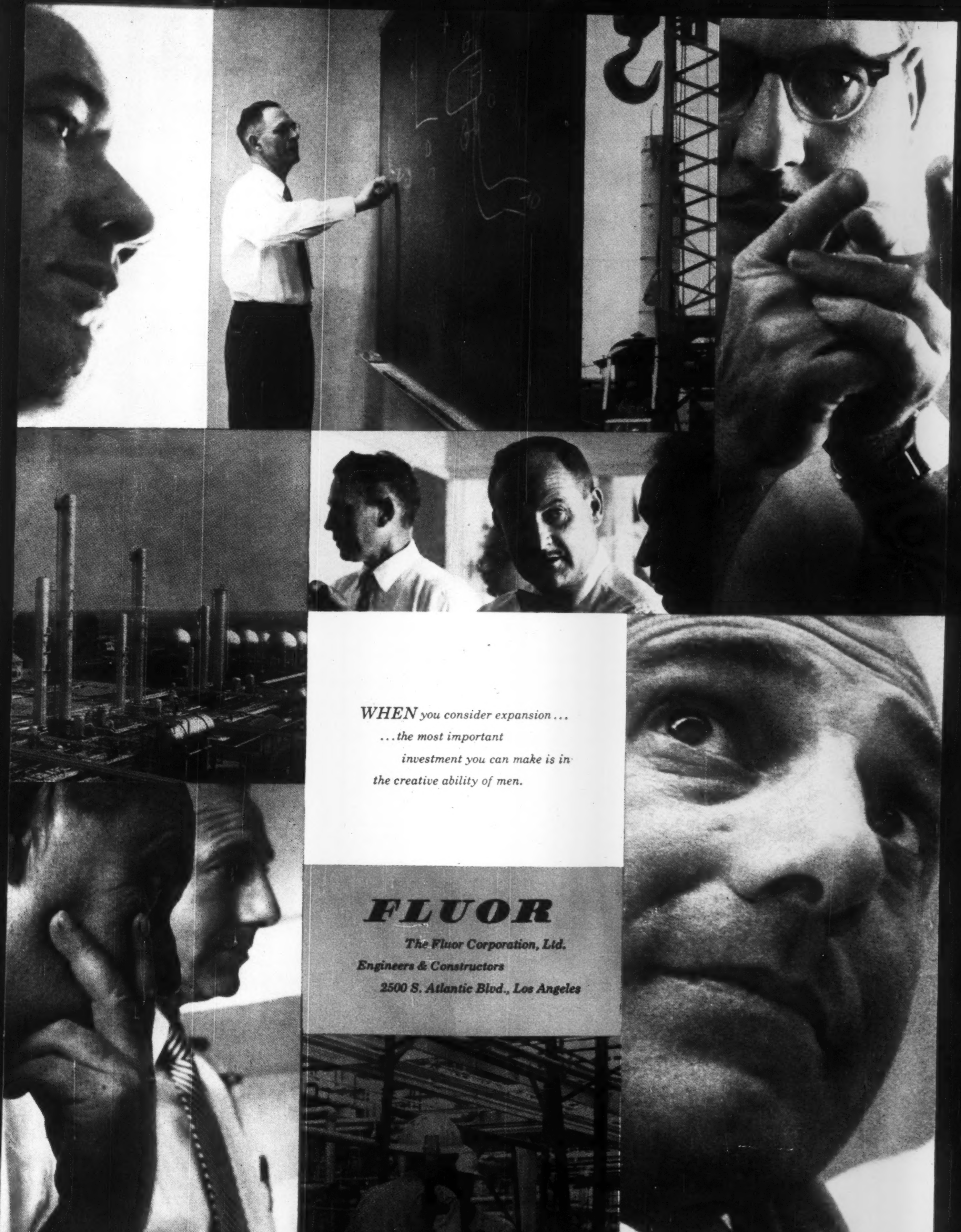
works, let's follow a purchase order through, step by step. In the past, certain detailed information—the vendor's name and address, the part number, the part description, specifications, and so on—had to be typed manually on the purchase order every time Clark bought something. Under the new system all the information is stored on two separate punched-paper tapes—one containing the vendor information and the other the information about the part to be purchased. Typing is necessary only when Clark makes a purchase from a new supplier or buys a new part.

When a Clark purchasing agent wants to order something, he has merely to remove from his file a small envelope containing the prepunched tape with all the information about the part to be purchased. The outside of the envelope has space for the variable details of the immediate purchase: quantity, delivery date, and the name of the supplier.

When the order typist gets this envelope, she pulls the tape on the supplier from her files and runs the two tapes through the Teletype transmitter (photo 1). Then she adds the variable details manually. Thus, the purchase order is prepared almost automatically.

The transmitter sends the complete purchase order information to the re-

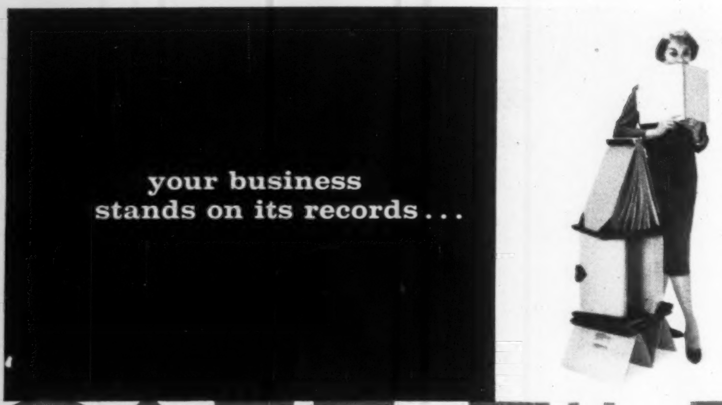




WHEN you consider expansion . . .
. . . the most important
investment you can make is in
the creative ability of men.

FLUOR

The Fluor Corporation, Ltd.
Engineers & Constructors
2500 S. Atlantic Blvd., Los Angeles



SAFE-FILE®

point-of-use insulated units keep them safe from fire and rifling!

Vital records can best be housed and protected *right at point-of-use* in insulated record containers from Remington Rand. There is a style available for every type of record – all *certified* by Underwriters' Laboratories, Inc., to protect contents from temperatures far in excess of those which would destroy paper in ordinary files. To learn the advantages of this *low-cost* equipment, send coupon today.

Remington Rand
DIVISION OF SPERRY RAND CORPORATION
Room 1958, 315 Fourth Avenue, New York 10, N.Y.

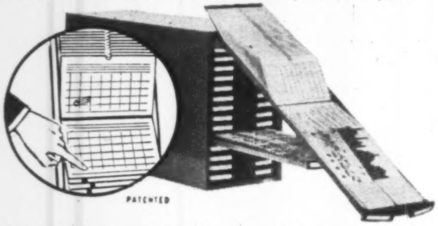
Send *free* copy of SC782 "The Cost of Burned Records".
NAME__________
COMPANY__________
ADDRESS__________
CITY__________ ZONE_____ STATE_____

INVENTORY CONTROL

Typical installation of Wassell Sig-Na-Lok visible cabinets—used at a St. Louis Depot for an inventory of Army vehicles, planes and replacement parts —

Reduce Costs
Prevent Losses
Create Profits

Signalled facts
STAY FACTS
with SIG-NA-LOK®
No undesired slipping of signals.



SIG-NA-LOK®
SIMPLIFIED
INVENTORY CONTROL

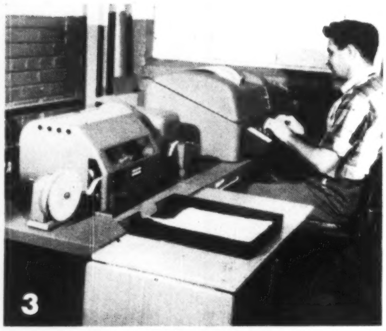
Sig-Na-Lok visible control puts your inventory at your fingertips. Every fact needed for effective control is signalled and the signals are locked until the facts change. In one complete record, you'll always know exactly what's on hand and when to reorder. Take the guesswork out of inventory — switch to Sig-Na-Lok and you'll

Prevent over stocks • Eliminate out of stocks • Increase turnover • Decrease costs — increase profits

Creator of Effective Tools for Effective Management

Phone Westport, Conn. CA 7-4111 or write
WASSELL ORGANIZATION, INC.
Westport, Conn.

Please send Free Booklet on SIG-NA-LOK Simplified Inventory Control.
Name__________
Company__________
Address__________
City__________ State__________ DR



3

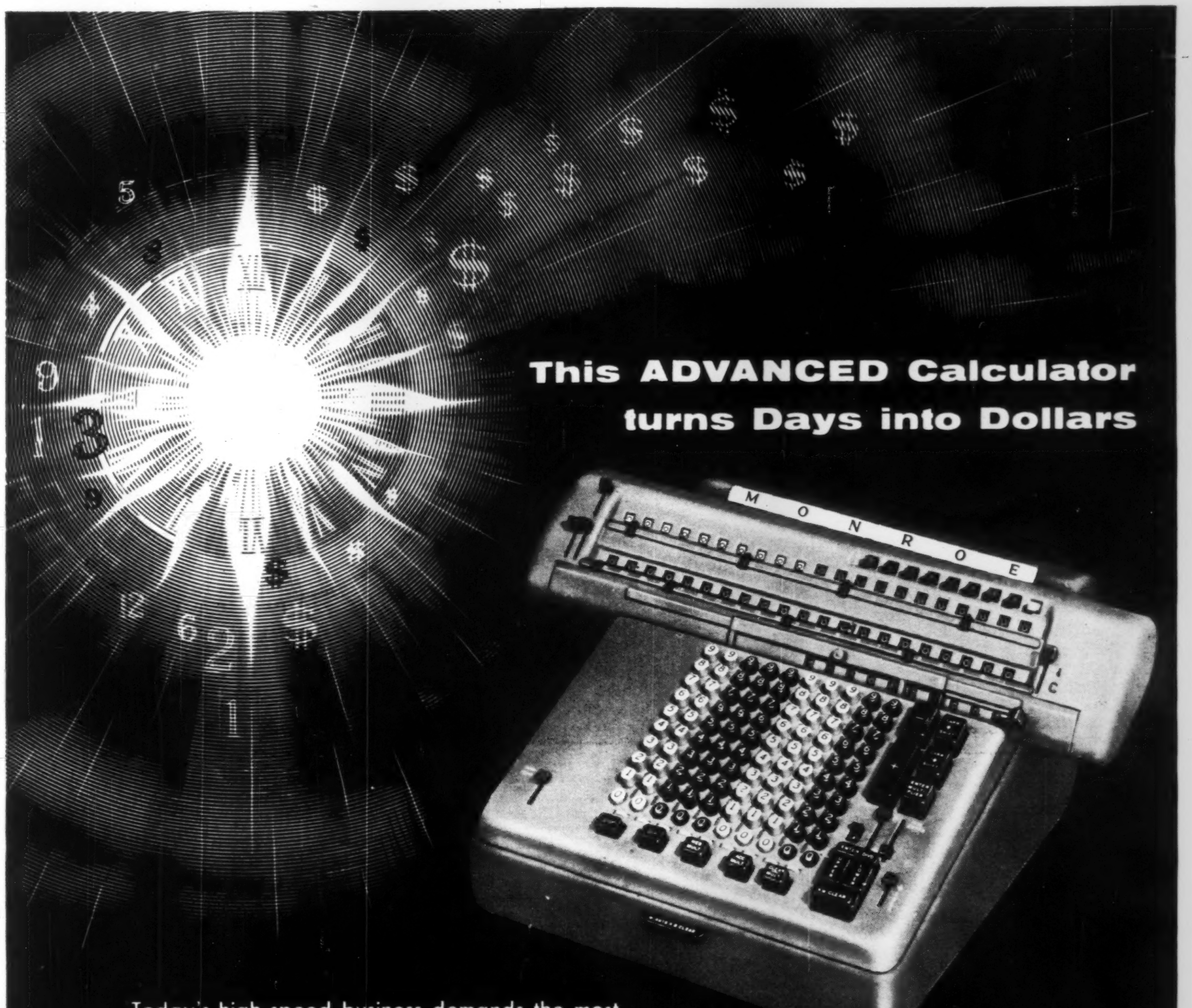
4

ceiving department and the tabulating department simultaneously, with information on quantity, price, and specifications automatically edited out of the tape going to receiving. Units in these departments receive the data and automatically punch out new tapes. In the receiving department the punched tape is torn off and filed by purchase order number (photo 2).

Meanwhile the original and copies of the hard-copy purchase order are sent on their way: the original to the vendor, copies to purchasing, accounting, production control.

When the shipment arrives from the vendor, the tape is taken from the files in the receiving department and placed on a Teletype sending unit. The actual quantity and the exact specifications of the goods received are manually typed in (photo 3) after the goods are inspected. This information is then picked up in both the tabulating and production control departments (photo 4).

There are now two punched tapes in tabulating covering this particular purchase order—the original sent from purchasing and the new one from receiving, reporting on the inspection of the incoming shipment. Previously, the tape from purchasing had been translated into a punched card (a daily procedure) on a tape-to-card converter (photo 5). The cards are filed in an



This ADVANCED Calculator turns Days into Dollars

Today's high-speed business demands the most advanced business techniques. That's why "get-ahead" businessmen insist on Advanced Monro-Matic* Calculators. At this minute more Monroe Calculators are at work on the desks of business than any other make. Today, Monro-Matic Calculators are being bought by top companies like these:

GOODYEAR Phillips 66

For the greatest savings, choose the world's most advanced calculator . . .

See the MAN from MONROE

Monroe Calculating Machine Company, Inc., Orange, New Jersey
A DIVISION OF LITTON INDUSTRIES, INC.
Offices for sales and service throughout the world

for CALCULATING
ADDING • ACCOUNTING
DATA PROCESSING MACHINES

the best looking offices start with
ARISTOCRAT®

MODULAR FURNITURE

And there's more than meets the eye. Here is a desk for a working man... with everything at his fingertips...yet out of sight and out of the way. Fitted to the busy executives exact work needs, it is one of hundreds of superb custom combinations possible with components of ARISTOCRAT *Modular* Furniture.

See the exciting use of ARISTOCRAT Modular Furniture by Michael Greer, N.S.I.D., at the Design Center for Interiors in New York City. Mr. Greer is President of the National Society of Interior Designers.

Remington Rand
Division of SPERRY RAND CORPORATION
Room 1962, 315 Fourth Ave., N. Y. 10.
Please send a free copy of your *Aristocrat* folder (FF236) to:
name__________
company__________
address__________
city______ zone____ state______

NOW... SIDE-Opening POCKETS

IMPROVE PIGGY-BACK CONTINUOUS POCKET-FORMS

I.D.P. Tapes or Punched Cards slide in, slide out faster, easier, from handy side-opening Piggy-Back Pockets. Traveling on "mother's" back, they are easily filed, quickly found . . . protected from damage or loss.

We can fit the pocket to your "rider" . . . let it travel piggy-back on any copy in your sets of Continuous or Unit Forms.

Write for Free Pocket-Form Samples . . . Today!

AMERICAN Lithofold Corporation
500 BITTNER ST · ST. LOUIS 15, MO

Drawer Model for 40 Keys
12"w, 5"h, 6"d

SIMPLEST SYSTEM YET!

REGIMENT Your Keys!

KEY-DRAWER
fits desk drawers and file cabinets

KE-MASTER SYSTEM also provides for capacities from 10 to 800 keys in Key Cabinets, Racks, Boards. See your local stationer, or write direct to Dept. D-9

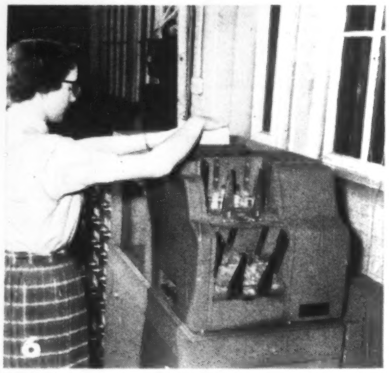
CUSHMAN & DENISON
CARLSTADT, NEW JERSEY

RC INC

Record Controls' skilled staff is prepared to study your office routines and co-ordinate your records system, recommending proper equipment and machines to do the best job.

RECORD CONTROLS, INC.
CHICAGO • 209 S. La Salle Street

5


6

open purchase order file. The receiving department tape is now also transmuted into a punched card which makes comparison of details much easier. Batches of open purchase-order cards can be run against batches of received-shipment cards through a collator (photo 6) or matching machine.

Batching and matching takes place twice weekly. Matched cards indicate that goods purchased have arrived at the plant and that the quantity received equals the quantity ordered.

Purchase order cards for which mates cannot be found are returned to the open purchase order file for a future return match with the next group of received-shipment cards.

Cards that do match are next run through tabulating equipment (photo 7) to make certain that all the specifications have been met by the supplier. When everything matches, the receiving report card—which has served its purpose—is destroyed.

The approved card is now filed to await the supplier's invoice, which is, in turn, translated into punched-card language when it arrives. When these two match, the check to the supplier is written automatically.

This streamlined purchasing procedure has enabled clerks to concentrate on trouble-shooting shipments that are missing instead of devoting most of their time to the repetitious handling of normal purchase orders. Major benefits

ELECTRIC EFFICIENCY FROM DeJUR NEW

DeJUR GRUNDIG

STENORETTE®

Dictating-Transcribing Miracle

311,500 STENORETTES now in use all over the world—and no wonder. STENORETTE costs half as much, does twice as much. You dictate and transcribe with the same unit. Magnetic tape allows up to 45 minutes of dictation, can be used over and over. Pushbutton controls. Dictate...review...correct... transcribe...all with a flick of your finger. **Really portable!** Works everywhere.

WRITE FOR A FREE FOLDER

$179.50

Plus tax. Transcribing accessories at slight extra cost.

DeJUR GRUNDIG
Stenorette

DeJUR TRIUMPH

ELECTRIC TYPEWRITER

World's most advanced typewriter.

The new star in the DeJUR office equipment family. The DeJUR-Triumph Electric's light touch hastens work. Its print-like type comes out letter-perfect (and line perfect) every time.

In speed, touch and range of performance, DeJUR-Triumph typewriters are expressly designed to surpass all others.

Complete line of electrics, standards and portables.

WRITE FOR A FREE FOLDER

AMERICA'S FASTEST GROWING *LINE OF BUSINESS MACHINES

DeJUR

* Registered Trademark

© DeJUR-Amsco Corporation 1958

MAIL THIS COUPON NOW

Dept. DR, DeJUR-Amsco Corporation
45-01 Northern Boulevard, Long Island City 1, New York

I would like to know more about the Stenorette ☐ and the Typewriter ☐

Name________________Company________________

Address________________________________

City________________Zone______State________

CONTROL
TOWER

KARDEX®

VISIBLE RECORD SYSTEM

KARDEX Systems give you *instantly visible* facts and figures for the control of virtually every business performance and function. A glance at KARDEX records and you know exactly what to do about what, and when! It's easily the finest expression of visible recordkeeping. Clip and mail the coupon to get detailed information on KARDEX Systems.

Remington Rand
Division of SPERRY RAND CORPORATION

Facts & Figures at SEE level

Remington Rand,
Room 1959, 315 Fourth Avenue,
New York 10, N. Y.

Kindly send colorful informative booklet—*"Kardex Aristocrat"* (KD829)

Name & Title____________
Company____________
Street____________
City______Zone____State______

paperwork cost TOO HIGH?

check VERSATILE *Stenafax*

ELECTRONIC REPRODUCING EQUIPMENT

FAST EASY TO OPERATE

ECONOMICAL

CLEAN
FAST
NO CHEMICALS

Many offices are realizing substantial personnel savings. Maps, drawings, office forms and other graphic material are reproduced as a stencil, offset master or single positive copy. "Push button" Stenafax allows the operator to do other work as this versatile machine operates and shuts itself off automatically.

Write for full information —

Stenafax will make...

mimeograph stencils
for your own mimeograph equipment

offset masters
for your own offset equipment

single positive copies
for immediate use and filing

TIMES FACSIMILE CORPORATION
540 W. 58th St., New York 19

have been in time saved and standardization of methods. The preparation of purchase orders and the clouds of paperwork that trail along behind them in most purchasing operations have been cut considerably. The electrical transmission of information between departments is many times quicker than the previous method of intraplant mail. Mistakes can be spotted sooner and corrected before they snowball.

These are the direct benefits. The company also points out that the new system has laid the groundwork for improving the efficiency of other Clark management functions.

"We don't yet know all the applications of these new tools," says John Mack. "But we will find out. We knew from the beginning, however, that the purpose of our new machines was not the elimination of workers but the reduction of work."

He warns, however, that not every company can profit from the use of IDP in purchasing operations. "For one thing, the equipment is expensive and must be used extensively," he points out. "And highly paid specialists are required to organize and modify the office system because a minor change in procedure can mean a major change in programing."

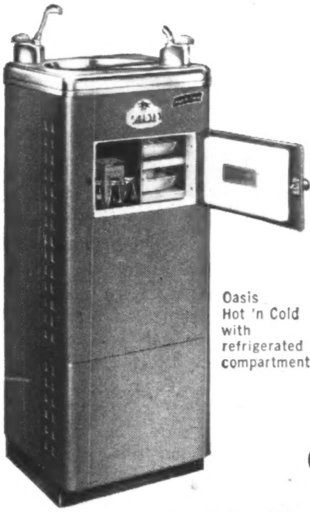
But if a company faces a growing load of paperwork, is willing to overhaul its systems completely to meet modern standards and to explore new applications of the latest equipment, the purchasing department can be a good place to introduce new methods.

One Machine Does the Trick

It is not always necessary to install a complete new system to make use of IDP. Just one machine, intelligently used, is bringing paperwork improvement to a medium-size manufacturer in the Midwest.

Roots-Connersville Blower, a division of Dresser Industries, Inc., in Connersville, Ind., is a producer of blowers, vacuum pumps, and related equipment for defense and manufacturing facilities. It has about 600 employees. There

Oasis Hot'n Cold adds zip to happy coffee-breaks



Oasis Hot 'n Cold with refrigerated compartment.

Yes, a Hot 'n Cold cuts coffee-break time 50% . . . pays for itself in months.

You end going out or sending out for coffee. There's no more messy coffee-making. You can stop costly coffee-break absenteeism overnight: Oasis 2-in-1 Hot 'n Colds near work areas give employees all the lift of a tasty coffee-break in half the time—plus cool water . . . and new instant soft drinks.

In seconds, you have an Oasis coffee-break. Just pour instant beverage into the cup. Fill with piping hot water from the Hot 'n Cold. Stir—and you have super-delightful coffee, chocolate, or soups. It's easy and fast.

As a new service, hundreds of businesses are using Oasis Hot 'n Colds to add tasty hospitality: Motels, beauty shops, auto dealers and many others make customers and prospects happy with an Oasis Beverage Center.

FREE BEVERAGE OFFER

From September 15 to December 15, 1958, you get a FREE Beverage Bonus with your order for an Oasis Hot 'n Cold. Has 100 packaged beverages—instant coffee, chocolate, beef and chicken broth, instant soft drinks, Pream and sugar. AND 100 cups, 100 spoons. Send coupon NOW. Get your free beverage certificate and free booklet, "How To Cut Coffee-Break Time In Half."

THE EBCO MANUFACTURING COMPANY
Dept 5-J, Columbus 13, Ohio
Rush me free copy of "How To Cut Coffee-Break Tim
In Half" plus my FREE BEVERAGE CERTIFICATE.

name____________________

company____________________

address____________________

city________________ zone_____ state______

OASIS

HOT 'N COLD WATER COOLERS

and standard coolers. Pressure and bottle models. Sold everywhere . . . rented in many areas.
Distributed in Canada by G. H. Wood & Co., Ltd.

OASIS
THE EBCO MANUFACTURING CO.
COLUMBUS, OHIO
U.S.A.

SPACE Saving STATION
the big advance in push-button filing ... files more cards in less space!

NEW KARD-VEYER®
MECHANIZED RECORD HANDLING SYSTEM

Newly styled, superbly engineered, the new KARD-VEYER units offer the largest number of records stored for the floor space used than ever before possible. Operator comfort and productivity is at its maximum and reference is speeded up, with any desired tray delivered at the touch of a button in 2½ seconds.

Remington Rand
Division of SPERRY RAND CORPORATION

Push a button ... pick a card!

Remington Rand
Room 1961, 315 Fourth Avenue
New York 10, New York
Kindly send new booklet LBV811
name & title________
company________
street________
city________zone____state________

Collect faster, sell more — at one and the same time...

WITH NEW BUDGET PLAN
INSTAL-VELOPE®
COUPON BOOK
(Patented)

Instal-Velope — the budget payment combined coupon and envelope — adds *extra* convenience to budget payments ... *extra* convenience that means *extra* profits to you. Users offer proof positive that complete account information on each coupon speeds customer payments — shrinks bookkeeping and overhead costs. *A different advertising message on each coupon sells, and keeps selling, your products all year long.* Instal-Velope Coupon Books are conveniently packed in units of 9 - 12 - 18 - 24. Try them. You'll collect faster, sell more — at one and the same time!

Effective Tools for Effective Management

WASSELL ORGANIZATION, INC.
Westport, Conn.

Phone CA 7-4111 or send coupon For Free Sample & Complete Details on Instal-Velope.
Name ....
Company ....
Address ....
DR
City .... State ....

TEL-A-STORY COMMANDS ATTENTION!

ELECTRIC Chores

Gives Your Product A Colorful Moving Message That Sells

DRAWS CONVENTION CROWDS . . .
PEPS UP POINT OF SALE . . .
STIMULATES SALES MEETINGS

The Tel-A-Story Automatic Projector will sell your product using twelve 35mm or 2" x 2" square transparencies on a 156 sq. in. picture screen. Copy changes automatically every six seconds. Economical to own and use. Ideal for any type product or service.

Write Dept. H for illustrated brochure and prices

TEL-A-STORY, INC.
523 Main Street, Davenport, Iowa

Introductory Offer

Electronically Welded Vinyl
ZIPPER-"BRIEFCASE"
You O.K. before delivery!
It's yours free! Order Today!
100 (12x16) only $65.00
We print trademark or name FREE in gold, silver or colors.
American Thermoplastic Co.
425 1st Ave., Pgh. 19, Pa.

Choose above briefcase in bright red or green or subdued brown, tan, black or navy.

are fifteen major product groups, but hundreds of different sizes and size combinations explode these to several hundred individual products.

The reports thus required include monthly production cost reports by products (direct labor, manufacturing burden, direct sales) and monthly sales reports by salesmen by products sold (quota and sales). The resultant accounting jobs—cost and sales analyses—run to a volume of approximately 2,000 items (punched cards) per day, or approximately 42,000 items per month to be summarized into reports. In total, more than a half-million marginal punched cards a year must be processed.

The company recently installed a McBee Keysort tabulating punch to handle these jobs. One of the most important results, according to controller G. A. Henry, is the speed with which figures now reach top management. Previously, it took until the tenth working day of each month to provide management with actual figures on production and costs for the preceding month. "Now," says Mr. Henry, "we supply them with complete data by the fourth working day."

A MIDWEST *manufacturer gets fresher facts at lower cost with new equipment.*

The machine is also being used to keep a check on the annual forecast of sales. To make this forecast accurate, each salesman must meet a quota and any of the salesmen can get an accurate check on how he stands at any time. The punched cards are run through the machine in three or four minutes to give the total amounts of his sales. Formerly, this would have required several hours work by a clerk, who would have had to check each individual entry and tabulate the figures. Also, cumulative sales figures are taken and posted each day.

"One of the major problems in industry," Mr. Henry states, "is that about 35 per cent of the clerks are checking

Her trouble is only half over. . .

She has come back—recovered from a mental disorder.
But will the community "take" her back?

This girl is no longer mentally sick. Her illness is over; she is back. But now—ready to take her place in the community—the question is will there be a place for her? A job? A home? A chance to lead a normal, useful life again?

Many patients, discharged from mental hospitals, break down again, because they find rejection, antagonism, and prejudice everywhere they turn.

Mental health associations are working to overcome such prejudice. To provide a warm welcome—for *all* returned mental patients. But they cannot accomplish this without your help. Don't fail them. Give to your local mental health association.

NATIONAL ASSOCIATION FOR MENTAL HEALTH
MH

Remember—with your help the mentally ill can come back! **GIVE**

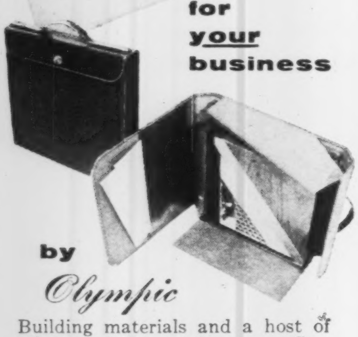
Can you afford not to attend?

1958 NATIONAL BUSINESS SHOW

This year more than ever before you should attend this important show . . . over 500 exhibits of the newest products and services.

Here, under one roof, is a unique opportunity to get complete and authoritative answers to many pressing management problems about the modern office. See by comparison just how efficient your office is. Learn how it can supply you with new and better information for controlling operations . . . at lower costs. Find out how to gear your office to provide better and more up to date facts on sales, customers, inventories and shipments as well as a host of other new and valuable information that can have a significant effect on your profit and loss statement.

The Coliseum, Columbus Circle, N.Y.C. Oct. 20th–24th, 1-10 p.m. daily.
For information and hotel reservations call Rudolph Lang, 530 Fifth Ave., N.Y.C., OXford 7-7142



CUSTOM BUILT CASES for your business by Olympic

Building materials and a host of other products can be more effectively demonstrated from a *custom-built* Olympic case. We will be pleased to quote on quantity production of special cases produced from your specifications in tough, good-looking TOLEX vinyl plastic. Send the coupon today for full information.

OLYMPIC LUGGAGE CORPORATION
Kane, Penna.
Gentlemen:
Description of our product is enclosed. Please contact us at once.
NAME ____
COMPANY ____
ADDRESS ____
CITY ____ STATE ____

FILES ARE NO PLACE FOR...

BLIND MAN'S BUFF

If it takes too long to locate the papers you want ask your Stationer about the ACCO System. Accobind Folders, Accopress Binders and other Acco products save time, save money, save loss. Made for every department of every business.

"ACCO BOUND PAPERS ARE SAFE PAPERS"

ACCO PRODUCTS
Division of NATSER Corporation
Ogdensburg • New York
In Canada: Acco Canadian Co., Ltd., Toronto

the work of other clerks. If this can be eliminated or lessened, there will be a consequent savings in time and a resulting dollar savings which will end up on the profit side of the ledger. With the use of this machine we have cut the checking time in half."

At present there is a card which shows the whole cost—direct labor, manufacturing overhead, and material costs. A card is now being designed to show variable costs by product lines and profit-volume ratios.

If a company had a running daily volume of only 200 items, and therefore only some 4,000 per month, the same marginally punched cards could be used, but they could be processed more economically with adding machines or key driven calculators—since, at such a small-volume level, a higher degree of mechanization could not be justified.

On the other hand, if daily volume were expanded to three or four times the present level—to 6,000 times and above—emanating from, perhaps, three different plant operations, one of two plans of increased sophistication would be falled for:

1. Decentralized operation; that is, installation of a tabulating punch in each plant to process the volume at the point of origin and consolidate only the three sets of totals monthly at the home office from punched summary cards or tape.

2. Centralized operation; that is, installation of tape-punching equipment at each plant to transmit the data daily by mailed tapes, or wire transmission, to the home office, where a small computer could consolidate and produce the required reports.

Which of the two approaches should be adopted will normally be determined by a study of the particular conditions, to determine which plan provides lower operating costs, quicker reports for both factory management and top executives, and more flexibility for sudden changes in daily volume.

It is important to note that in these three examples, the progression through three levels of mechanization is accomplished without disrupting established procedures or policies. In other words, growth or expansion need not deter an orderly and profitable advance toward office automation if the basic plan is well thought out.

Better Control of Production

Unlike the shoemaker's unshod offspring, the offices of office equipment manufacturers are likely to show off the latest handiwork in their own line. For instance, Kleinschmidt Labora-

DATA ON *the progress of jobs in the shop are now transmitted within minutes to . . .*

. . . the production control office and posted immediately on the scheduling boards.

tories, Deerfield, Ill., a manufacturing division of Smith Corona-Marchant, Inc., is cutting reporting time considerably in its production control operations with the use of its own equipment.

By the use of punched-tape communications, the company has reduced the time lapse between shop action and office records from eight hours to fifteen minutes. Provided with information that reflects the actual shop situation, the production control department can spot potential trouble and increase the efficiency of machine loading. And the company claims that the new system does this at less cost than the "slip and messenger" method it replaced.

Here's how the new system works. Along with the job order that moves through each required work station in the shop goes a prepunched paper tape that identifies the job. At each dispatcher's desk there is a punched-tape transmitter linked to the printer-receiver in the production control office.

When the job is completed at one work station, the dispatcher runs the job order tape through the transmitter, followed by another prepunched tape that describes the work that has been done. These two bits of information are received on the page printer in the production control office, where the latest information is posted on the production control board.

Remington Rand

AS ESSENTIAL AS A TYPEWRITER

New!

TRANSCOPY® METEOR

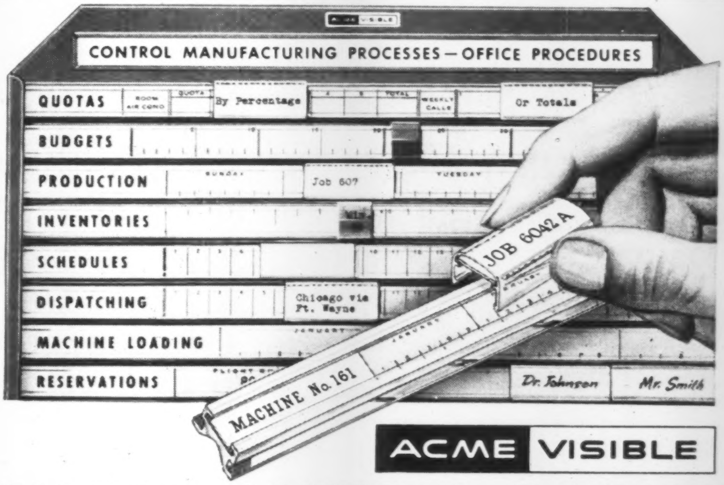
CONTACT PHOTOCOPY PRINTER-PROCESSOR

Here is a *new* photocopier that offers quality prints *faster* and *easier* than ever before possible. Anyone can make perfect copies of anything—anywhere! It's called the TRANSCOPY *Meteor* and users claim it's *as essential as a typewriter.* If you run a business or institution you should know all about it. Write for *free* literature!

Remington Rand
DIVISION OF SPERRY RAND CORPORATION

REMINGTON RAND
Room 1963, 315 Fourth Avenue,
New York 10, N. Y.
Please send me a *free* copy of folder P516 on the *new* TRANSCOPY *Meteor.*

NAME & TITLE________________
COMPANY________________
ADDRESS________________
CITY________ ZONE____ STATE________



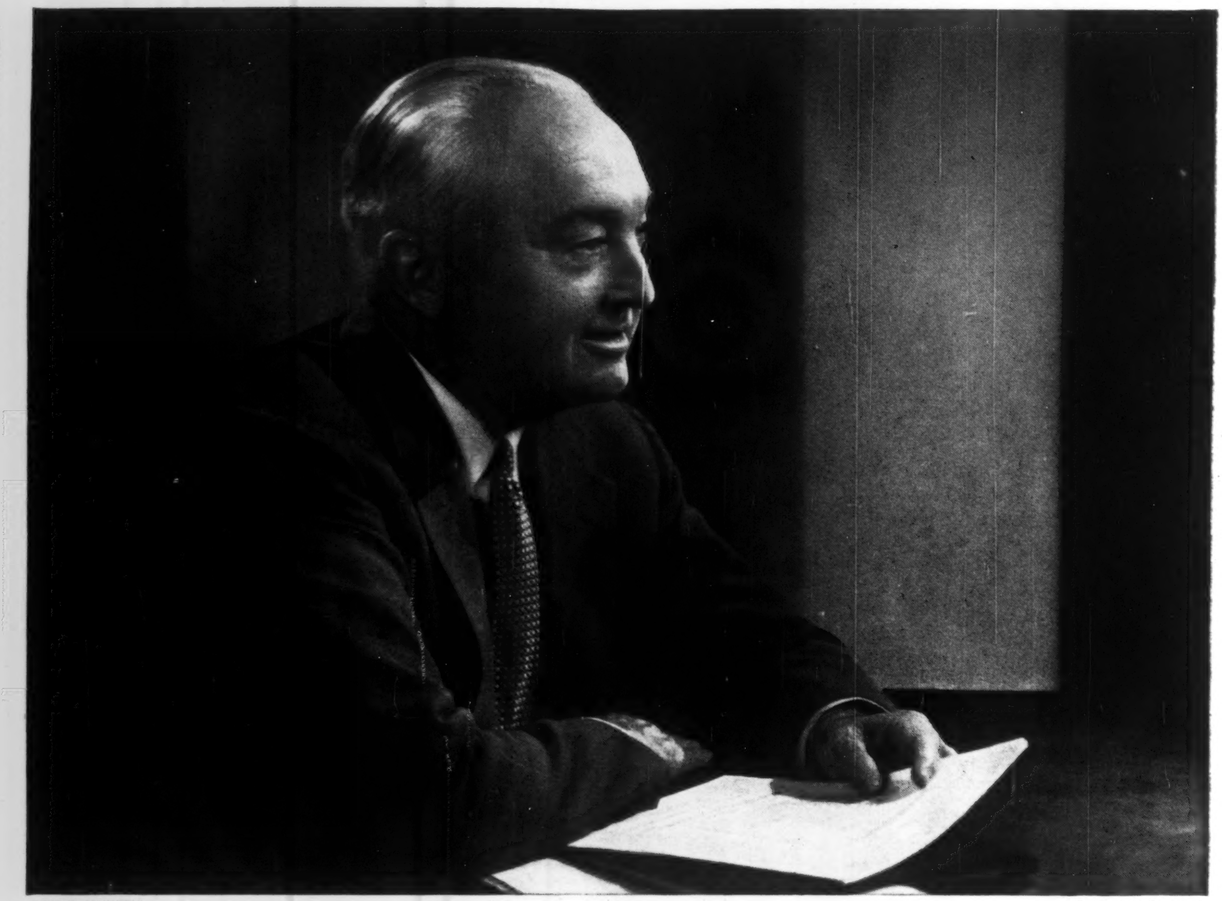
VISUAL CONTROL PANELS

Chart Action, Indicate Trends, Permit Comparison, Organize Facts

Complete flexibility with limitless signalling and charting possibilities . . . Easily adapted to your individual record requirements.

Lightweight panels contain clear plastic tubes which are individually removable and may be shifted from one position to another . . . Clarity of tube provides full legibility of contents.

ACME VISIBLE RECORDS, INC., Crozet, Virginia
☐ Send us more information on Visual Control Panels.
☐ We are interested in Acme Visible equipment for________________records.
Kind of record
B-858
Company________________
Attention________________
Address________________
City________ Zone____ State________



ROY T. HURLEY

Portrait by Bachrach

"More than 11,000 of our 19,000 employees are now buying U.S. Savings Bonds Regularly"

"We are delighted to see the steady increase in the number of our people who are buying U.S. Savings Bonds through the payroll plan. More than 59% of our employees are now enrolled.

"To enjoy the benefits of peace and freedom, we must provide for our own personal financial security and, at the same time, create the power for peace through support of an adequate defense program. Systematic savings through the Savings Bond program will keep us ahead of any potential aggressor and help insure the soundness of an economic system which encourages and permits each of us to look forward to a bright, secure future."

ROY T. HURLEY, ***Chairman and President, Curtiss-Wright Corporation***

Today there are more Payroll savers than ever before in peacetime. If employee participation in *your* Payroll Savings Plan is less than 50% . . . or if *your* employees now do not have the opportunity to build for their future through the systematic purchase of U.S. Savings Bonds, give your State Director an opportunity to help. Look him up in your phone book. Or write: Savings Bonds Division, U.S. Treasury Dept., Washington, D. C.

100
100
SERIES E

New Horizons in Manning the Office

THE WHITE COLLAR worker of years past is almost as obsolete today as the old detachable white collar itself. Both the high stiff collar and the class that wore it have new, flexible replacements.

The typical employee in an office area today is frequently a trained technician. He doesn't ply his trade with eyeshade and inkwell. More likely, he works through the media of circuitry, Boudot coding, magnetic drums, electronic controls and computation.

Not that all office people work at electronic machines—far from it. But the kind of person who survives in today's variously automated offices is a far cry from his counterpart of 50 years ago. He is paid more commensurately with other employees, he is better educated, more responsive to the needs of his firm, and more communicative with others.

How does office work differ from that of a generation ago? Sometimes it is difficult to look back and imagine just what the boys with the black arm bands did. Generally, though, they preserved history. They had nothing to say about what was *going to happen*.

Nowadays, office people provide the information and controls not only for historical purposes but for decision making, both immediate and for the future. They analyze inventory positions, sales positions, shop loads, cash positions. They predict capital goods needs, and, generally, supply guides for management decisions. They use sophisticated machinery and methods to provide management with the information needed to run a complex operation.

Run-of-the mill clerical work, of course, is still with us. The general clerical worker still survives, and probably will for some time. But economists tell us that big industry is heading for still higher minimum wage rates—$3.50 per hour minimum, including fringe benefits, has been seriously predicted for the near future. You just can't do $3.50 worth of work in an hour with a quill pen. Thus, the productive level of the office worker must of necessity increase.

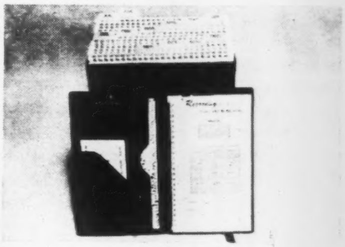
Management's nerve center

Today management is beginning to recognize that office people of all types comprise the "central intelligence agency" to which management's entire operation must be attuned. That such recognition will grow seems certain; in fact, the office specialist probably now stands on the threshold of new achievements. And one of the "specialties" that this trend is bringing into increasing prominence is the office systems group.

Specialists in one sense, systems people are at the same time generalists, helping to fit the pieces of the other specialists together into an integrated

AUTOMATIC PLOTTING *is provided in IBM service bureaus. Data from punched cards are run through the Dataplotter and show up on graphs for quick decision making.*

Sell More
Sell More
Sell More



Your Salesmen can INCREASE THEIR SELLING TIME 50% by Organizing Their Time More Effectively

Recorday helps them:

- **Organize their time**
- **Keep appointments**
- **Work effectively**
- **Remember details**
- **Keep promises**
- **Follow through**
- **SELL MORE**

A complete 12-Month Memo System and Work Organizer With Leather Pocket Case—Designed Especially For Salesmen.

Used By Many Leading Companies

Send Today for complete 12 month unit on approval, complete details and quantity prices. Satisfaction unconditionally guaranteed.

Recorday Co. Dept. D-9
69 Harvey St. Cambridge 40, Mass.

Please send the following Complete Recorday Units On Approval:
...... With Black Morocco Case $10.50
...... With Deluxe Brown Case $8.50
...... With Brown Pin Seal Case $6.50

Name........................Title........
Company....................................
Address....................................
City.......................State...........

Panama-Beaver

Carbon papers
Inked ribbons
Unimasters

Coast to Coast Distribution
MANIFOLD SUPPLIES CO.
Brooklyn, New York

whole, tying in the contributions of others, interrelating, proving out, eliminating such specialized activity that is not properly geared to the whole. Systems work must operate on a management level, for the pieces of the puzzle must be fitted together from a vantage point taken above the jumble. Significantly, management is beginning to recognize this and is expecting from systems people more in the way of organizational integrity in procedures, less spoon-feeding by systems people of clever ways out of isolated problems.

Whether the systems man is to become a universally indispensable super-high-class administrative specialist (or generalist) remains to be seen. He, too, stands at a threshold, and he as an individual does not always see his opportunities in terms of the broad approach. Where he does possess such understanding, he is often hurried off into a line management position.

Systems work first operated as a recognized company activity in the late 1930's and early 1940's. World War II gave it tremendous impetus. Immediately after the war, as American business prepared for the immediate letdown that didn't come, there was a slackening in systems work growth.

Then in the early 1950's this new function began to move ahead. Today its stride is quickening. Of 36 companies surveyed in a recent University of Michigan study, over 60 per cent had organized their systems departments during the last five years.

This same survey pointed up the fact that in 50 per cent of the companies, the systems department reported to top management. The balance of the companies had the departments reporting to the controller. The table above shows the results of a similar survey of 842 companies made by the Systems and Procedures Association in 1956.

It seems natural that systems people should have highest status in the industries where systems work has made the greatest gains. Yet it may be misleading to pinpoint specific industries that have reaped the greatest harvest of effective systems work. Actually, it is the companies that recognize the need, regardless of size or industry, which will gain the most from a good systems group.

By and large, the value of a systems unit isn't confined to the lower echelons. Top management, too, often receives direct and significant assistance from the systems group.

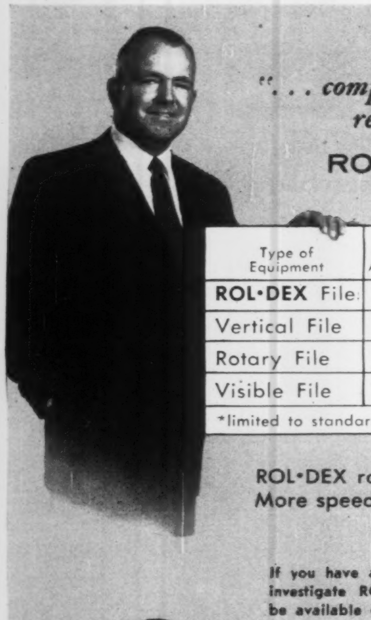
Many companies have found that systems is a sound proving group for additional first-line management responsibilities, sometimes in areas not closely identified with systems work.

As systems work proves its value to

Who Listens to Systems People?

	Percentage of systems groups reporting to			
Industry	Presidents, Vice presidents	Controller	Treasurer, Secretary	Other
Manufacturing	20	50	5	25
Insurance and banking	51	20	4	25
Utilities	24	34	5	37
Retailing and wholesaling	34	28	13	25
Government	17	20	—	63
Total	25	41	5	29

Information on developments in systems work and personnel trends was provided by Systems and Procedures Association members, Dar Tisdale, executive secretary of SPA, William C. Gill, Douglas Aircraft Company, and Myron Higbee, Burroughs Research Center.



". . . compare ROL•DEX with any other active record handling equipment . . ."

ROL•DEX has all the features!

Type of Equipment	Greatest Accessibility	No Electrical or Mechanical Servicing	No Record Rewriting	Fastest Reference Time
ROL•DEX File	x	x	x	x
Vertical File			x*	
Rotary File			x*	
Visible File			x*	

*limited to standard size forms as 5x3, 6x4 or 8x5

**ROL•DEX rolls the records and the clerk:
More speed, greater capacity, greater accessibility are the result.**

If you have active record handling in your operation, you should investigate ROL-DEX. Our systems experts will be available on your request.

ROL•DEX
Pat. and Pats. Pending

Rol•Dex Division

WATSON MANUFACTURING COMPANY, Inc.
— a company of specialists —
Jamestown, New York

WATSON MANUFACTURING COMPANY, Inc.
Rol•Dex Division, Dept. D-1, Jamestown, New York
I'd like to know more about ROL•DEX record handling equipment.
Name .... Title ....
Company ....
Street ....
City .... State ....

why this is the era of the Friden automatic office

With installation of one or more Friden Tape-Talk machines—each a "system" in itself—you can see the savings every hour!

These machines process all kinds of office work, involving both numerals and words, automatically with *punched paper tape*. It's a much simpler way of running an office than you have known.

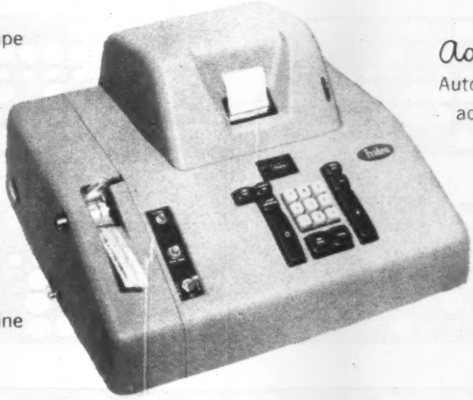
Friden promises this: In exact proportion to the degree of office automation you wish to achieve, Friden Tape-Talk machines will (**1**) Eliminate need for manual movements and operator decisions; (**2**) Increase work volume output without increasing payroll costs or overtime; (**3**) End primary and compounded errors normally occurring in data recopying.

The challenge of Friden Tape-Talk is big as your imagination—its application possibilities exactly suited to your needs. Get the facts *now!* Call your nearby Friden Man or write Friden, Inc., San Leandro, California . . . sales, instruction, service throughout U.S. and the world.

Friden Creates
A New World
For Business

Friden has the System

© Friden, Inc.



Computyper® Automatic tape billing department in one desk

Selectadata® Automatic tape reader-selector-sorter

Flexowriter® Automatic tape writing-accounting machine

Justowriter® Automatic justifying type-composing machine

Add-Punch® Automatic code tape adding-listing machine

Teledata® Automatic tape transmitter-receiver

Automatic Input-Output Machine

Friden Mailroom Equipment

Friden Natural Way Adding Machine

Friden fully automatic Calculator—The Thinking Machine of American Business company management and becomes a component of management, it finds itself serving in other areas.

Office equipment manufacturers have been aware for many years that despite the rapid advances of market research they frequently face heavy odds in bringing out new types and models of machines. As a service to their own companies, systems people have been able to point out to equipment producers, as never before, the specific needs of their companies and their industry.

In this connection the Systems and Procedures Association unofficially provides an unusual service to equipment manufacturers. SPA members, through their contacts with people in other industries, often come across instances of equipment utilization that meet their own needs. This application usually is fed back through sales representatives to the producer.

At its annual meeting, SPA offers the equipment manufacturers the opportunity to obtain additional feedback on the needs of business and industry directly from those responsible for the purchase and for the use of their products.

One of the important items that the producers derived from the feedback from the systems people is the evaluation made on their productivity claims. Through feasibility studies, research, cost comparison studies using work measurement techniques, and so on, systems people evaluate the machines. While most of these evaluations are confidential, enough "unclassified" information usually finds its way back to the producer for him to check his claims against the evaluation.

How Temporary Workers Can Fill the Gap

THROUGHOUT THE RECENT business slowdown, one of the lucky lines that kept right on booming was the business of supplying temporary office help. As the upturn began to make itself felt in some sectors of the economy, some companies called on temporary workers rather than regular help to process the sudden upsurge in orders which they feared might not be permanent. By using temporary help a few weeks or months they could wait and see how the wind was really blowing, without experiencing any delay in getting the work out.

The volume of companies supplying temporary help has doubled in the last five years, is now $50 million annually, by a conservative estimate, and is still growing at a rapid rate.

While many companies that pay as much as 20 to 30 per cent of salaries for extra fringe benefits have been finding it difficult to attract qualified workers, the temporary agencies, which generally provide only the minimum legally required fringes, have had no difficulty. Manpower, Inc., has a pool of upwards of 60,000 workers in cities around the country; Russell Kelly has 16,000; Workman Service, Inc., additional thousands. Office Temporaries, Inc., has 15,000 in the New York Metropolitan area alone, and has filled a million jobs in the past fifteen years.

It is mainly the savings on fringes that enables the agencies to pay reasonable rates and yet make a profit. The employees they supply are, of course, paid only when they work, and the agency handles all payroll costs and generally bills its clients at 20 per cent over the worker's rate.

Where do they come from?

How have the temporary agencies been able to find skilled office help during the postwar years, when many of the ablest personnel departments in the country have been having trouble on this score? There's no magic to it. Many of the hundreds of thousands of young women who marry and retire from the labor force each year when they have had just enough experience to make them really valuable to their

Meet ALL Your Moving Requirements with

THESE NORTH AMERICAN FEATURES SPEED YOUR MOVES, SAVE YOU MONEY!

Fleet of 2200 hi-capacity vans (drop-frames, straight frames, open tops, and special large size doors) made for your goods and products.

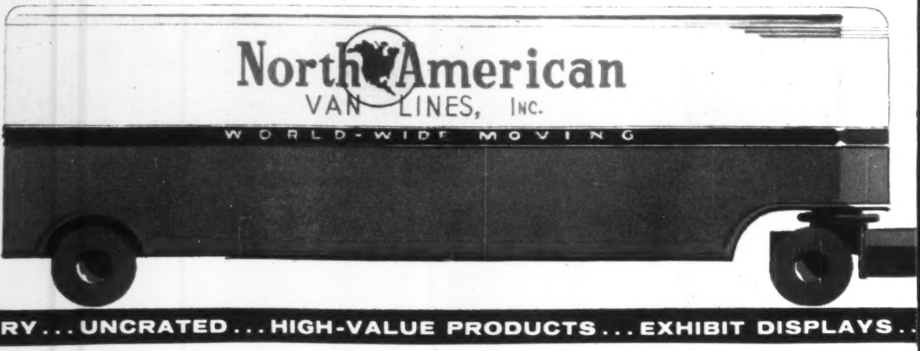
World's most modern fleet dispatching system assures you prompt pickup and delivery service. Shipments always under control.

Agents where you are—agents where you're going—over 1100 in all—give you the famous North American "Follow-Thru" service.

Carefully selected and trained moving technicians handle your products with care. Use of pads eliminates all need for crating.

New Products Service delivers new home furnishings, appliances from production line to outlet or user—without crates.

LISTEN TO ALEX DREIER,
"Man on the Go for the Van on the Go," every Sunday on Monitor. NBC Radio, 6:05 PM New York Time.



DOOR-TO-DOOR DELIVERY . . . UNCRATED . . . HIGH-VALUE PRODUCTS . . . EXHIBIT DISPLAYS . .

employers are in the market for temporary work a few years later. Home duties still prevent them from taking permanent jobs, but they are able to work steadily for a few weeks or months at a time or for a few days each week. And, of course, to many of these housewives, security fringe benefits are relatively unimportant, since they are generally covered by their husbands' benefit plans.

These women make up the main source of temporary workers, but there are also many people whose regular careers lie in other fields but who are willing and able to do straight office work at times.

The agencies are able to supply operators for virtually all kinds of specialized office equipment except electronic computers. Most in demand, of course, are such general workers as typists and file clerks.

Using proxy bosses

"Between jobs" executives and retired executives are also available. For example, Office Temporaries has a few of the former who are keeping busy in bookkeeping departments, and several of the latter. Since this service makes a specialty of handling large group jobs that require a number of people at one time, it often supplies not only the workers but the supervisors, and finds the executives valuable for this. In one case, a retired controller supervised clerical operations on a proxy battle. On several occasions he was able to replace the client company's vice president, who would otherwise have had to make a number of flying trips to Chicago.

High-quality help

So plentiful are the qualified people who want temporary work, in fact, that the good agencies are able to be highly selective. Office Temporaries currently rejects about eight out of every ten applicants. It aims to supply not only people who can fall to and handle the work with a minimum of instruction but those who fit in personally as well.

Why do many companies use temporary office help? Because it is so easily available—no hiring cost, no fringe benefits to pay, no elaborate payroll operations (since the agency pays the workers and handles all deductions). Some concerns have, perhaps, hired temporary workers in order to put off needed expansion of the workforce too long. There is a definite place in the economy for them, although they can't be considered replacements for permanent employees.

The jobs for which temporary help is indicated may be classified into the following categories:

- Handling peak loads, which occur regularly at the end of every week or month, once every few months, or once a year. A force of temporary workers can produce a real saving in overtime costs here, even working in shifts around the clock under its own supervisors to get the work out on time.
- Special one-time large-scale jobs—stock issues, consumer surveys, proxy battles, special telephone solicitations, changeovers of filing systems, changeovers of bookkeeping operations to machines or punch cards. More and more, the trend in group operations is for the agencies to develop groups that are accustomed to working together on certain jobs of this kind.
- Special promotions or celebrations. Actors and actresses temporarily "at liberty" welcome these jobs. A New York bank, for example, used several young actresses as attendant elves for its Santa Claus last year. (Along with them, the agency supplied a Santa with an authentic beard.)
- Filling in on any type of office work when an employee is away because of illness or vacation.
- Occasional off-beat jobs—temporary workers can act as witnesses to the opening of a safe deposit box, for example, or make special deliveries of valuable objects (many of the services bond all their workers). END

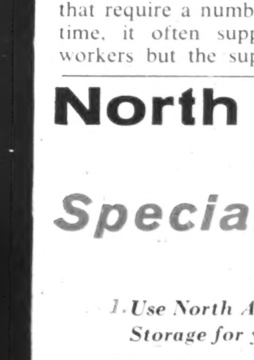
North American Van Lines'

Specialized INDUSTRIAL Services!

1. *Use North American's "Wife-Approved" Moving and Storage for your Transferred Personnel.*
2. *Exhibit Displays and Traveling Shows Moved Safely, on Schedule, Without Expensive, Bulky Crating.*
3. *High-Value Products Shipped Door to Door, Uncrated —No Disassembly or Reassembly.*
4. *Relocation of Plants, Offices and Stores — Complete Service, Moving Desks, Files, Furniture, etc.*
5. *World-Wide Moving Service via Land, Sea, Air.*

Your local North American Van Lines Agent and Warehouseman is listed under "MOVERS" in the Yellow Pages

. . . call him on any moving or storage problem—local, long distance, overseas. Or send coupon below. North American Van Lines, Inc., World Headquarters, Fort Wayne, Ind. North American Van Lines Canada, Ltd., Pickering, Ont.



ZIPPER CARRYING BAG!
When you inquire about our Specialized Industrial Services, ask your North American Van Lines agent for one of these handy bags . . . "air-travel" size.

RELOCATED OFFICES AND LABORATORIES

Clip this Coupon!

North American VAN LINES, Inc. WORLD-WIDE MOVING

North American Van Lines, Inc.
World Headquarters, Dept. DR-98, Ft. Wayne 1, Ind.
Send me information on North American Specialized Industrial Services as checked below. This does not obligate us in any way.
☐ Have agent call ☐ Exhibit Displays ☐ Overseas Moving
☐ Transferred Personnel ☐ New Products Service
NAME ____ TITLE ____
COMPANY ____
ADDRESS ____
CITY ____ ZONE ____ STATE ____

Lets you know when the fuel is low!

CLEARLY a gift that builds business!

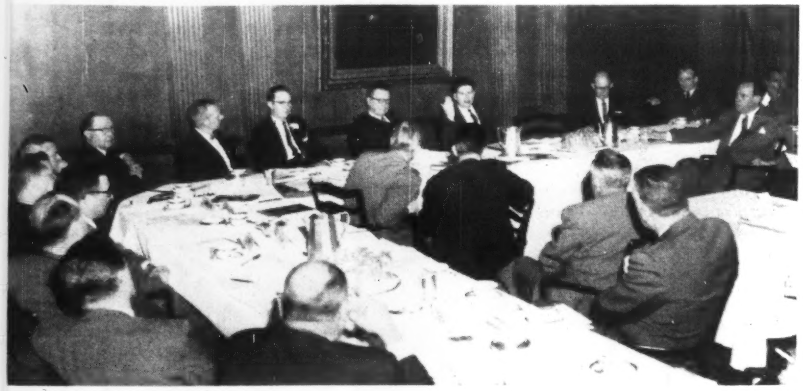
The new Scripto VU-LIGHTER is the perfect prestige gift for your customers and prospects. Lightweight; beautifully trimmed in chrome. Your choice of colors. So inexpensive—especially in quantities of 25 or more. Unconditionally guaranteed!

YOUR TRADEMARK, or a miniature of your product, will be inserted in the transparent VU-LIGHTER fuel reservoir.

Scripto
WINDGUARD
VU-LIGHTER

For name of your local distributor write:
Vu-Ad Company, a Division of Scripto, Inc.
Box 4996, Atlanta, Georgia

Participants at Modern Office Feature Round Tables



Executives from the office equipment industry and from corporations making major improvements in office operations met together with outside specialists at DR&MI editorial round tables on new office trends and developments. Among the participants in these day-long sessions in Cleveland and New York were:

William Aiken	H. B. Maynard and Company, Inc.
Joseph Anderson	Dictaphone Corporation
Rudolph M. Ashner	Werner Textile Consultants
P. A. Barbee	Eastman Kodak Company
Robert Bayless	Seaman & Company, Inc.
Hugh Beckwith	E. F. Hauserman Company
William Biracree	Smith Corona-Marchant, Inc.
Cliff Boyce	Steelcase, Inc.
James Breen	The National Cash Register Company
W. H. Brush	The Atlantic Refining Company
William Clark	American Photocopy Equipment Company
David Corkle	Teletype Corporation
Thomas M. Cox, Jr.	Owens-Illinois Glass Company
Howard Ellis	E. I. du Pont de Nemours & Company
William Ferguson	Carborundum Company
Jerold Ferry	Moore Business Forms, Inc.
Will Fisher	General Electric Company
Joseph H. Flather	Smith, Kline & French Laboratories
James Foley	Remington Rand Division, Sperry Rand Corporation
G. W. Forcade	Underwood Corporation
Robert Gad	Shaw-Walker Company
Paul Ben Garrott	Standard Register Company
I. D. Hasselo	Frank M. Knox Company
Robert W. Hinck	Wallace Clark & Company
Thomas Johnson	Ebasco Services, Inc.
Robert Lindgren	Friden, Inc.
Jack Maloney	DeJUR-Amsco Corporation
William Mawe	Olin Mathieson Chemical Corporation
Samuel J. McCartney	Thomas A. Edison Industries of McGraw-Edison Electric
R. F. Neuschel	McKinsey & Company
E. E. Plomondon	International Business Machines Corp.
A. J. Ross	Monroe Calculating Machine Co.
W. F. Schneider	Sun Oil Company
Maurice Stierer, Jr.	Globe-Wernicke Company
Gene Stoney	Diebold Inc.
C. B. Thompson	Royal McBee Corporation
George O. Vincent	Western Union Telegraph Company
Robert Walker	Robert Walker & Company
James Wood	Copease Corporation
William Zechel	Uarco Inc.

REPRINTS of this Extra Emphasis Feature

THE MODERN OFFICE: Industry's New Profit Frontier

are available at 40 cents each, three for $1; additional copies at the same rate. Please send payment with order to:

Readers' Service Department
DUN'S REVIEW and Modern Industry
99 Church Street, New York 8, N.Y.

NEW MARKETING TWIST: COMPANY SPONSORS TRADE SHOW

continued from page 47

and polishing on various types of equipment. They left 200 problem projects with the company's product engineering department at the show for working out later—certainly a distinctive way to bring the company in closer working relationship with its market.

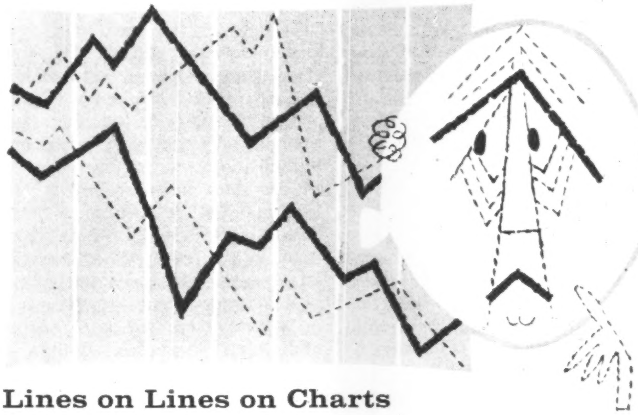
The various manufacturers' exhibits covered a half-acre and numbered 54—virtually all the important makers of machinery using abrasive belts.

Benefits to the machinery producers were many—they were presented with a free showcase and an avid audience for their equipment. Substantial orders were written up at the show for machines ranging from air-driven hand tools to 11.5-ton giant grinders.

And of course, these services to equipment producers bounce back to the benefit of B-M both directly and indirectly. First of all, the show creates a closer working partnership between the maker of the belts and the producers of the equipment on which the belts whirl and grind. The producers include B-M belts on their models and recommend them to customers.

But the company doesn't press for such a *quid pro quo* from exhibitors at the show. Instead, as a spokesmen says, "Any effort—such as the show—that will boost the sales of abrasive belts in general will help us, for we are bound to get our share of the market."

The show has been helpful in projecting the image of Behr-Manning as a company that is actively doing something to stir up business for the entire industry. Says the sales manager of a grinding and polishing machinery manufacturer: "After leaving Troy, I continued on a sales trip for several weeks in the West. The show was the major subject of conversation everywhere. On my return, it was evident from orders and correspondence that the show was quite a business stimulant." —T.K.



Lines on Lines on Charts

On charts, where sundry trends are plotted,
Behold the solid line and dotted.
See how they cling, then leave each other,
Then intertwine, like child and mother.

The dotted leaps more than the solid,
The latter being somewhat stolid.
But also, from its lofty summit,
The dotted's sometimes seen to plummet.

It may, in fact, hell-bent for zero,
Crash through the solid line, our hero,
Whereon the solid, although split,
And hurt, and staggering a bit,

Bends down to help the daffy dotted
And shortly afterwards has got it
And lifts it up, as by a tether,
And both lines slowly rise together.

And thus we get, through dips and rallies,
A diagram of peaks and valleys,
And lines on charts, in many cases,
When closely watched, cause lines on faces.

—Richard Armour

Eyeing a new plant site?

The Texas Power & Light Company invites expanding industry, large or small, to make use of the services of its staff of specialists—skilled and experienced in serving officers and executives of industrial corporations. Without obligation, your particular location problems will be carefully and thoroughly analyzed by those having broad knowledge of industry and facts pertaining to manpower, materials, resources, finance and other important factors in Texas.

Write, wire or call J. D. Eppright, Director, Industrial Development Division, Texas Power & Light Company, Dallas, Texas. Inquiries held in strict confidence.

Booklet detailing plant location services sent on request.

TEXAS POWER & LIGHT COMPANY

International Markets **. . . Trends and practices in overseas trade**

Organizing to Protect Your Profits Overseas

ALEXANDER O. STANLEY

You can broaden the span of your overseas operations and save tax dollars by following the formulas developed by international tax experts.

WITHIN THE short space of seven years, American business investments abroad have doubled. They now amount to more than $24 billion, and in 1958 something like $4 billion in fresh capital may be added. And even if the rate of investment on overseas operations should be checked in the months ahead, this will only be an intermediate trend. The long view suggests further rapid expansion in American operations abroad.

Since the business of investing and employing capital overseas is a rather complicated one, however, considerable forward planning is essential. So is a thorough understanding of the different forms of organization possible.

The factors that influence management to move productive facilities into specific areas overseas may be many, but mainly the decision to invest abroad stems from a desire to create *and protect* profits from foreign sales. In deciding where and when to invest, management now as always, considers the possibilities of the markets, the laws that affect business operations in the various countries, and the political trends. But lately it has begun to pay more attention to the tax attractions offered by a growing list of countries abroad.

Before seeking "tax havens" or "profit sanctuaries," however, management would do well first to explore, in consultation with the company's legal counsel, the tax exemptions and exceptions that are available to internationally minded companies within the framework of the U.S. Internal Revenue Code.

A company can improve its tax position on income derived from business abroad in one of two ways: (1) it can retain more income dollars after taxes; (2) it can postpone payment of U.S. taxes for an indefinite period, and so obtain more working capital for use abroad.

Two cautions: First, the extent to which you can secure these advantages depends on your *method of operation* abroad as well as the *form of organization* used in your operations overseas. Second, if any notion of tax evasion rather than tax relief is impelling you to consider shifting some of your assets overseas, forget the whole idea. The U.S. tax code has plenty of barbs on which you can get hooked, and you can be sure that every business investment you make abroad will come under scrutiny of the Internal Revenue Service.

Four basic types

A blueprint for developing acceptable overseas organizations actually exists within the U.S. Internal Revenue Code. While there are some variants, the following are the four basic types that enable you to obtain immediate or eventual tax benefits. They are listed in random order, not in order of importance, since individual circumstances will obviously dictate the type or combination of types most suitable for the individual company.

TYPE A: U.S. corporation operating through branch(es) abroad. Least complicated to establish, this type also is least likely to provide tax advantages except in an indirect way. If overseas losses develop during the formative years, they can be written off annually against profits developed by the U.S. parent. Then, once the operations start to make a profit, you can convert the branch into a tax-saving type of organization. And there are other favorable factors. The legalities of closing a branch are usually less complicated than with other types of organizations. Also, there are investment guarantees against inconvertibility, expropriation, or war damage for U.S. corporations and their branches doing business abroad. These guarantees are available through the Export-Import Bank acting as agent for the International Cooperation Administration (see "Financing Your Overseas Business," DR&MI, June 1958). Also if the profits realized cannot be transferred to the parent corporation because of blocked currencies, the U.S. tax on these earnings can be postponed.

Some weak points

But this type of organization also has some vulnerable spots:

- When you are ready to convert your operations from a foreign branch to a foreign subsidiary, you will have to apply for a ruling from the Treasury Department to determine whether any U.S. tax will be levied on the transfer of assets. Favorable rulings are hard to get.
- While foreign taxes paid by an overseas branch may be taken as a credit, a "per country limitation" places a ceiling on the amount. This can hurt if tax rates in any one country exceed the present 52 per cent corporate income

tax rate levied in the United States.

- The U.S. corporation operating through a branch exposes itself to the jurisdiction of a foreign government.

TYPE B: The Western Hemisphere Trade Corporation. This type of corporate structure, which is available only to U.S. corporations, may be desirable if the company has substantial operations in Latin America or Canada. To qualify, the corporation that is set up must derive 95 per cent of its gross income from sources outside the United States but within the area of the Western Hemisphere, Bermuda excluded. And 90 per cent of that income must come from active conduct of trade or business—a term that does not cover royalties or dividends.

The plus spots

If the corporation qualifies, here are the tax advantages:

- The WHTC pays a U.S. income tax equal to slightly less than 22 per cent of the first $34,200 of its income, and approximately 38 per cent on the balance. The over-all effect is a tax saving up to a ceiling of about 27 per cent.
- The parent corporation of a WHTC subsidiary is entitled to an 85 per cent deduction for dividends received from the subsidiary. And while the remaining 15 per cent (of dividends) is taxable, the maximum effective rate equals only 7.8 per cent (52 per cent of 15 per cent).
- Like Type A, the WHTC can take credit, up to the "per country limitations," for foreign taxes paid out.
- The intercorporate dividend tax can be eliminated if the parent files a consolidated return including the WHTC. Moreover, the 2 per cent tax penalty on consolidated returns does not apply to the WHTC portion of net income.
- The WHTC can be liquidated under the "tax-free" provisions that apply to domestic subsidiaries. This exception applies even if (1) only cash is passed to the parent on completion of liquidation and (2) the amount exceeds the cost of the WHTC stock to the parent.

The minus spots

But there is also a debit side to the WHTC. Here are some of the liabilities:

- A corporation of this type must conduct all its business within the Western Hemisphere. Obviously, if your overseas operations extend to other areas, a separate corporate or branch structure will have to be developed.
- All *purchases* must be made within the Western Hemisphere except "incidental" items. And "incidental" is defined by the IRS as small and infrequent.
- All *sales* must be made within the Western Hemisphere. Moreover, clear-cut passage of title (to goods sold) to buyers outside of the United States but within the designated hemisphere zone is a "must." (The tax effect of such passage of title under sales contracts is a technical question, and best left to company counsel who, with proper guidance, can establish proper formulas for you.)
- All dealings between the parent and WHTC subsidiary should be conducted "at arm's length," as if each were a separate entity. Otherwise the Treasury Department may regard the WHTC as a mere agency, conduit, or branch of the parent. A particularly sensitive area is the price structure on goods, materials, or services supplied by the parent to the WHTC. These should carry a reasonable mark-up. And expenditures for advertising and related outlays should be assessed in fair proportion. Any effort to fatten profit margins of the WHTC at the expense of the parent would, in effect, constitute tax avoidance, and might, to some degree, affect favorable tax treatment of the WHTC.
- Like domestic corporations, the WHTC is vulnerable to a penalty surtax on unreasonable accumulations of earnings. (But if it is necessary to retain a high percentage of overseas earnings for business reasons, special dispensation is possible in special cases.) If losses are sustained, the WHTC offers no immediate tax balm to its parent, such as is possible under Type A.

TYPE C: The Section 931 corporation—The S.931 is a domestic (U.S.) corporation which conducts the greater portion of its business within a U.S. "possession." Specifically, 80 per cent or more of gross income must be developed within the U.S. "possession" and at least 50 per cent of it must be derived from the active conduct of trade or business. While this type of corporation has limited applicability, its advantages and drawbacks should be considered carefully. In general, tax regulations treat the S.931 as though it were a foreign corporation. Here are the possible tax advantages:

- If the S.931 qualifies for exemption, its income from all sources *outside* the United States, including all U.S. possessions, is completely tax-free as far as the IRS is concerned, although it is, of course, subject to taxes in effect within

WORKERS ON THE *90,000-acre Firestone rubber plantations in Liberia setting out at sunrise to tap rubber trees. Actually, Firestone operations in Liberia have long antedated that country's present-day status as an overseas tax haven for U.S. companies.*

Don't be surprised . . . but your

OLD FREIGHT BILLS ARE WORTH MONEY!

One phase of our business is to help you

RECOVER FREIGHT OVERCHARGES

You'd be amazed to know how many companies, large and small, unknowingly paid excessive freight costs. The carriers didn't do it intentionally . . . but it happened because of hurried classifications, unfamiliar personnel and category confusion for new products.

Our business is to find these overcharges . . . prove the claim . . . and recover this money which is rightfully yours. Our service is effective—almost $1,000,000.00 has been recovered for our clients to date.

HERE IS *ALL* YOU DO: It's simple! Just pack up your freight bills for the past two years and send them to us . . .

WE will immediately place these bills through our extensive audit. If we find overcharges, these will be filed *in your name*. You receive a statement of all claims filed.

THERE IS NO CHARGE for our auditing service. You pay only 50% of the money *we actually recover* for you!

Write, wire, phone or mail coupon *today* . . . NOW!

MIDWEST
FREIGHT TRAFFIC BUREAU, INC.
Nationwide Traffic Analysts
1030 West Chicago Avenue • SEeley 3-1044
Chicago 22, Illinois

FREIGHT BILL PAYMENT SERVICE • ROUTING SERVICE • RATE SERVICE TRACING SERVICE • CLAIM SERVICE • YOUR TRAFFIC MANAGER'S RIGHT HAND MAN

Gentlemen:
I am sending you my freight bills for the past two years. Please audit them and report your findings. There is no cost to me unless you find overcharges. If you do, I understand your charge is 50% of the money you recover.
☐ Please send more information.
Name__________
Company__________
Address__________
City______ Zone______ State______

the U.S. possessions or any foreign country in which it does business.

- There is no tax ceiling, no tax penalty on income accumulation, except on that portion derived from U.S. sources. And this free accumulation clause applies whether the S.931 capital shares are owned by individual shareholders or by a U.S. parent corporation.
- You can liquidate an S.931 corporation tax-free without worrying about permissive rulings from the Commissioner of Internal Revenue.

But here are the negatives:

- Losses sustained by an S.931 are of no current tax benefit to the parent.
- "Foreign" taxes paid out by the S.931 may not be used as credit by the parent.

Dividend problems

- Dividends can constitute a tax problem. If they are paid to a parent corporation, the 85 per cent deduction is disallowed and the parent is susceptible to full tax payment on them. The practice is to retain accumulated income within the S.931 corporation until it is liquidated and the transfer becomes tax-free. But, if intermittent dividends are desirable, then *individual* rather than *corporate* ownership of stock is a tax "must." Shareholders pay the full rates applicable to their income levels, but in some cases this may be lower than the corporate rate. Moreover, a larger surplus can be created and tapped for immediate business operations since earnings from foreign sources are not exposed to U.S. taxes.

TYPE D: The foreign corporation. As a vehicle for conducting foreign business, the foreign corporate subsidiary provides, in most cases, the greatest flexibility and tax-saving of any type available. Here, in capsule form, are the key features that can save you tax dollars and business headaches:

- The overseas subsidiary corporation is not subject to U.S. taxes on income obtained from sources outside the United States.
- It will insulate, to some degree, the parent (U.S.) corporation from any adverse business legal actions or liabilities arising within the foreign market —unlike Type A, which as a branch faces full exposure to such contingencies.

Deducting foreign taxes

- If the parent corporation owns 10 per cent of the *voting* stock of a foreign corporation from which it receives a dividend, it may take as credit, within statutory limits, foreign income taxes paid by the foreign corporation. Also it may take as tax credit any foreign income taxes paid out by any other foreign corporation in which the dividend-paying subsidiary owns a minimum amount of 50 per cent of voting stock.
- Whether the subsidiary corporation manufactures products or sells products or services supplied by its parent or others, it can retain all its income from sources outside the United States without U.S. tax exposure.
- The tax exemption extends to penalty surtaxes on accumulated earnings, so long as the income is earned outside the United States.
- The subsidiary may keep U.S. dollar deposits in the United States (or elsewhere) or it may use the funds for reinvestment without incurring U.S. tax liability.
- The profit retention feature makes it possible for the subsidiary to broaden its base of operations at a progressively faster rate. To illustrate: Assume the subsidiary earns $100,000 or 10 per cent on its invested capital and pays a 20 per cent tax locally in one year. It then has $80,000 available for reinvestment. If the same factors prevail the second year, the dollar equivalent added after taxes becomes $86,400, and in the third year, $93,213. So within a three-year period, the increment to working capital would be $259,712. This is almost double the rate of profit accumulation and reemployment possible under domestic tax schedules.
- This earned surplus may never be taxed if the parent decides to liquidate the subsidiary and observes the ground rules in doing so. Basically the U.S. tax authorities must be satisfied that the liquidation was inspired by recognizable business hazards rather than by the desire to avoid taxes. What are some of these business reasons? Currency restrictions, confiscatory tax rates, threats of expropriation, might be considered extenuating circumstances warranting liquidation *after some years of actual operation*.

Lessened limitations

- Unlike Types B and C, the overseas corporation does not have to contend, for the most part, with any statutory requirements covering percentage apportionment of income by source. It has no geographical limitations and can operate however and wherever it chooses. Only its U.S. income will be affected by U.S. taxes.
- Also, there are no rules governing the *type* of activity. Because of this feature the overseas subsidiary is an ideal vehicle for companies that obtain income from intangible assets such as (a) royalty income from patents or trademarks under license agreements and (b) interest or rents from foreign sources. In each case the advantage lies in *deferring* payment of U.S. taxes on the income. But be sure to observe prescribed regulations if you transfer any *appreciated* intangibles or other prop-

erty to the overseas subsidiary. Otherwise, you may expose yourself to possible liability for U.S. taxes on this type of transfer. Another problem, sometimes overlooked, grows out of the provisions relating to a foreign personal holding company. These are spelled out in detail on page 126.

There are, of course, some other drawbacks that should be weighed. At least two factors are a liability: (a) dividends paid to the U.S. parent are fully taxable and do not fall within the 85 per cent dividend-received deduction, although an offset exists in foreign tax credits; (b) if losses are taken by the subsidiary, the parent cannot use these as an offset to its own earnings picture.

Two tax code problems

Any of the foregoing devices may help you to protect and promote your overseas operations. In taking advantage of them, consider carefully the following suggestions advanced by Paul D. Seghers, chairman of the Legal and Tax Committee, International Section, New York Board of Trade, and member of the New York firm of Seghers, Reinhart and McCall, international tax attorneys.

- If you are investing abroad for the first time or reorganizing your foreign trade organization and methods, you may encounter two stumbling blocks:

1. Section 367 of the Internal Revenue Code stipulates that as far as certain reorganization features are concerned, a foreign corporation shall not be considered as such without prior approval by the Commissioner of Internal Revenue.

2. Section 1491 imposes a tax liability on certain transfers of property to a foreign corporation. There is an excise tax on certain transfers of stock or securities by a U.S. corporation to its foreign counterpart equal to 27.5 per cent of the *excess* value over its adjusted base.

A way out

These two sections hit hard at any domestic corporation that owns substantial amounts of *appreciated* operating assets in a foreign country. The tendency then is to continue operating abroad through a branch, but actually a detour is possible. In some circumstances, after clearance from the IRS, tax-free transfers of *appreciated* property can be made to another foreign unit of the domestic parent. And one foreign subsidiary can, in some cases, transfer funds, or property acquired with its profits, to another foreign subsidiary without incurring any liability for U.S. tax. In effect, the parent company can retain abroad the profits arising from foreign operations.

Once you have decided on the type

Cost-cutting
FACTS & IDEAS
worth thousands of dollars!

PALLET
HANDLING
in NARROW
AISLES
RAYMOND

Here . . . at your fingertips . . . are the dollar-and-space-saving facts about handling unit loads in narrow aisles. Learn how you can store more goods in your present warehouse. Increase capacity as much as 50% . . . make new floor space more productive with narrow aisles. This new 24 page reference book contains complete specifications of Raymond hydraulic and electric pallet handling trucks for every size and type of operation. Profusely illustrated. Send for your FREE copy today!

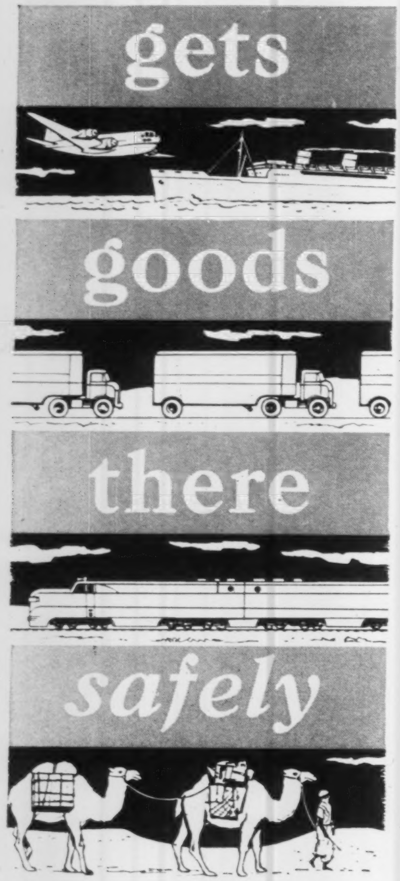
RAYMOND

FREE . . .
"Pallet Handling
in Narrow
RAYMOND Aisles"

The RAYMOND CORPORATION
4672 Madison St., Greene, N. Y.

NAME ____ TITLE ____
COMPANY ____
STREET ____
CITY ____ STATE ____

EXPORT PACKAGING by KENNEDY



If your export packaging demands protection against moisture, corrosion, mildew, mold and contamination, let Kennedy help you DELIVER YOUR GOODS — in factory fresh condition. Developing dehydration packaging for the Air Corps during World War II, Kennedy has wide practical experience in fabrication of foils, films, and waterproof papers for export packaging. May we work with your engineers?

Write, wire or phone today —

KENNEDY CAR LINER AND BAG CO., INC.,
2000 Prospect Avenue, Dept. J
Shelbyville, Ind.

kennedy

of foreign operation, here are the basic tax factors to observe:

- Be sure that all your overseas transactions have substance and that they have a real business purpose.
- Be sure that you plan operating procedures carefully to comply with legal requirements.
- Be sure to keep careful records on the country in which goods are sold. This is to comply with the "source" income factor.
- Remember that if goods are processed or produced by *the seller* in one country and sold in another, the income must be apportioned between the two countries.
- Remember that *where* title to goods or property passes is an important consideration in determining the "source" of income. This must be watched carefully, especially in activities of Types B, C, D.
- Consider that the details of sales transactions and transfers of property will be examined to determine if there has been any attempt at tax avoidance.
- Keep in mind that if merchandise is stored or warehoused outside the United States and if orders for it are received, accepted, and filled abroad by *the seller*, the sales without question create income from sources *outside* the United States.
- Consider that precedent exists for arrangements between buyer and seller to fix the *place* of sale outside the United States, even though all or most of the other mechanics of sale take place in this country. But this "documentary method" of selling abroad rests on technicalities and for that reason extreme caution should be exercised.
- Be sure intercompany charges are fair, especially where the parent manufactures goods for the overseas subsidiary. Fair market value is a good index.
- Be sure all transactions between the overseas subsidiary and the parent are sharply and clearly delineated so that no confusion exists.

Foreign personal holding companies

- Finally, consider carefully the provision relating to foreign personal holding companies. An overseas corporation could be considered a foreign personal holding corporation and exposed to undesirable tax consequences if two circumstances obtain. These are (1) if more than 50 per cent of the value of the foreign corporation stock is owned directly or indirectly by not more than five "individuals" who are citizens and residents of the United States (*related* "individuals," no matter what the number, are regarded as a single individual for purposes of defining the number of stockholders in this type of holding corporation) and (2) if at least 60 per cent of the foreign corporation's gross income during the first taxable year (and 50 per cent annually thereafter) consists of dividends, interest, royalties, rents, and equivalent type of income. But if the foreign subsidiary's stock is wholly owned by the parent corporation and the latter's stock is widely and publicly held, it escapes this classification.

Picking a base

If your activities and aspirations are global, you will probably wind up with an assortment of organizations in near and far world markets. But if you follow the pattern of the more sophisticated international companies, your center of operations will be eventually lodged in one of the more popular profit sanctuaries as a holding and or operational company. Choosing the site of this key unit is not just a matter of comparing tax bargain areas. There are other and equally important considerations. Here are the factors you should look for, suggested by Joseph S. Cardinale, partner in the international law firm of Momsen & Freeman, New York:

- Limited exchange restrictions or none.
- A comparatively stable exchange rate.
- A generally favorable international balance of payments.
- A political situation comparatively free from stress and strain, and a historical pattern of favorable treatment of foreign business interests.
- A comparatively stable economy.
- Good lines of communication and transportation to other countries in which investments are made or where business is done (this applies particularly to operational aspects).
- Complete or considerable freedom in capital and dividend repatriation.
- Preferably, no income tax or similar tax on income earned within or without the country's borders. Or, tax on income from outside sources. Or, no tax on foreign-source income developed through special types of corporations.
- Absence of legislation or regulations that prevent or limit accumulation of surplus or undistributed profits.
- No special tax or surcharge on the accumulation.

Do such tax havens exist? Actually six countries—Panama, Liberia, Tangiers, Venezuela, Switzerland, and Liechtenstein—meet most of the foregoing tests, and Panama is the most popular among lawyers concerned with international tax havens.

- If overseas operations are beginning to figure more prominently in your balance sheet, as they are for a growing list of U.S. companies, consider the tax haven; it can provide a means of expansion and protection of profit margins in the markets of the world. END

Sales & Distribution

Marketing notes and comment

New Approaches to Changing Markets

MARKETS ARE shifting targets, and to hit them squarely companies frequently have to take aim from a fresh angle. For instance, the booming sales of nonfood items in supermarkets has presented a rich new target for many manufacturers.

But to operate in this new market where failure or success hinges upon the product's ability to catch the eye of the shopper as she trundles down the aisles, manufacturers have to develop new merchandising and packaging approaches. Such mundane items as nails and clothespins are striking attractive poses in festive-looking plastic containers, while hair preparations appear in plastic bottles that strive to create the urge to squeeze.

One company that decided to break into supermarket selling, a 151-year-old manufacturer of alarm clocks, confronted an unusual packaging problem that called for an imaginative solution. The traditional cardboard box in which the clocks were packaged wasn't up to the heavy handling frequently encountered. And if the clocks were displayed on shelves without their traditional trappings, they would soon be affected by atmospheric conditions and possibly damaged by supermarket shoppers, who have a weakness for fingering the product before purchase.

To get around these problems and take advantage of the new market, the General-Gilbert Company of Winsted, Conn., hit upon the idea of putting its clocks into hermetically sealed cans. Across the nation this month, Grand Union supermarkets will begin to display and stock the clocks, stacked like so many cans of coffee. There is also the added advantage of avoiding de-

GILBERT
CLOCK
ALARM
CLOCK

IT TICKS GOOD *like a canned clock should, according to the manufacturer, who this month is breaking into the supermarket market with a new development in packaging.*

Loading-out costs
cut up to 65%
with
OLIVER Farquhar CONVEYORS

View above shows one of the two 160-foot Oliver-Farquhar Model 536 Power Belt and Roll-Free Gravity lines as seen from the extreme end looking toward the loading dock. View below shows how the cartons move from the power belt line in the background to the gravity line where shipments are labeled and then move over the booster conveyor to the loading dock.

Mr. Louis DiLorenzo, Traffic Manager of Warren Webster & Company, Camden, New Jersey, has replaced the "all hands" with the "no hands" method of material handling. In their Shipping Department this "no hands" technique requires two single line Oliver-Farquhar Conveyor systems. The products of the company, heating and air-conditioning equipment, are stacked on either side of these lines. Loading-out to trucks can be done quickly and efficiently from either conveyor line.

At Warren Webster they've eliminated overtime, improved inventory control, speeded truck loading, cut costs up to 65% and reduced employee fatigue. Why don't you take advantage of this same "no hands" method of material handling? Wire, phone or send coupon for all the facts on Oliver-Farquhar Power Belt and Gravity Conveyors—your key to lower costs!

SEND THIS COUPON
A. B. FARQUHAR DIVISION
The Oliver Corporation
Conveyor Dept. S-66, York, Penna.
Factory Branch: 618 W. Elm St., Chicago 10, Ill.
Please send me information on . . .
☐ "How to plan your own conveying system"
☐ "Model 536 Bulletin # 536"
☐ "Roll-Free Gravity Bulletin # 801"

Name ______

Company Name ______

Address ______

City ______ State ______

Symbol of service wherever movement by truck is required . . . whether by common carrier or leased trucks.

RYDER TRUCK RENTAL

RYDER SYSTEM, INC.

GENERAL OFFICES: ENGLE BUILDING, P.O. BOX 33816, MIAMI, FLORIDA

MODERN INDUSTRY BOOKS

How to Make and Use Charts—*Effectively*

A practical guide to the use of modern graphic methods in business. Reduces the theory and practise of presenting facts in visual form to their simplest elements. It gives you direct, detailed, and thorough understanding of the *why* as well as the *how* of each step of the graphic method.

GRAPHIC PRESENTATION SIMPLIFIED

by R. R. LUTZ

For ten years, R. R. Lutz was General Statistician to the National Industrial Conference Board

256 pages 6¼ x 9¼, $5.

A MODERN INDUSTRY BOOK

It shows you how to make all kinds of graphic charts . . . how to use them . . . how to analyze a problem, select the equipment, and execute the graph or graphs best suited to the problem.

Dozens of illustrations point up the text.

A Working Manual of Public Relations Techniques

This book gives you tested-by-experience material to help you solve your most difficult public relations problems. It brings you the best thinking of 34 recognized authorities—more than have ever discussed public relations within the covers of a single book.

YOUR PUBLIC RELATIONS

Edited by GLENN GRISWOLD and DENNY GRISWOLD

with chapters by 32 other experts in the public relations field

644 pages, 32 illustrations, 6⅛ x 9¼
$7.50

A MODERN INDUSTRY BOOK

Here is a practical working handbook which for the first time applies the actual case history approach to public relations. Each chapter includes step-by-step case examples to show tested public relations methods that have proved successful.

With this handbook at his fingertips, any executive can plan his entire public relations program with confidence.

Order from Book Department
Dun's Review and Modern Industry,
99 Church Street, New York 8, N.Y.

terioration in storage—an important factor in light of the large stocks needed to sell through volume outlets such as supermarkets.

Onward to yesterday

Many people have felt that the recent boom in foreign cars was the ultimate reaction against the supposed design excesses of Detroit. Now in even more startling contrast to the "forward look," comes the "backward look"—backward, specifically, to 1901 and the vintage Oldsmobile of that year.

Of course, public demand for the atavistic autos isn't likely to reach proportions that would worry Detroit. But they are selling—in more ways than one. Some corporate purchasers, including oil companies, large retailers, and auto-makers, find that the antique cars can more than pull their own weight in sales promotion assignments.

At least three companies are rushing into the market. Authentic versions of the horseless buggy that was highly popular around the turn of the century are being pushed into production by the Dyer Products Company, Canton, Ohio, by American Air Products Corporation and by the Starts Manufacturing Company, both of Fort Lauderdale, Fla.

Of course, the manufacturers (who sell the cars for prices ranging from $895 to $1200) are not producing exact replicas of the gas chariots of the past. Instead, they are incorporating latter-day advances in engineering, such as air-cooled engines and sealed beam headlights—while completely eschewing the finny furbelows that Detroit is offering today. Top speed is a nostalgic 35 miles an hour; fuel consumption is 65 miles per gallon.

Telegrams on the honor system

While Western Union's total volume has been rising steadily in recent years, thanks to the success of various special services for business, the patronage by the public has actually been declining. To whet interest and stimulate sales to the public, the company recently harnessed two growing forces in the marketing field—credit buying and automatic vending—by combining them in an experimental machine. The Autofax—the first vending machine requiring no coins or bills—was installed in the West Side Air Terminal in New York City several months ago. The user writes his message, marks it "Charge" or "Collect," pushes a button, and drops it in a slot. Transmission is automatic, and charges are billed later to the sender's home or business address.

The company reports that the collection rate so far has been 99 per cent plus, and that volume is so encouraging that six more "we-trust-everybody" machines will be spotted around the New York area in a few months. —T.K.

HOW TOP MANAGEMENT FORECASTS THE FUTURE

continued from page 35

expansion plans, stretched out constructions already in progress, reduced inventories, tightened budgets, eliminated overtime, cut production schedules.

Says one thread manufacturer: "On the basis of our forecast, we developed a production plan to taper off our inventories gradually. That way we reduced operating time slowly, instead of going from overtime to a four-day week overnight. Layoffs were minimized, and lengthy shutdowns have been completely avoided."

"We boldly lopped expenses, inventory, and production when we saw the recession coming," says a sporting goods company. "If we hadn't, we'd be in bad trouble right now."

"Our forecast of the current recession served to trigger our diversification program," says the president of a small electronics company. "The decision was vital for the company's growth and stability."

Prophecy without honor

A few of the companies correctly forecast the recession but did little about it. "We simply didn't believe what our figures told us," an equipment manufacturer reports. "We didn't have the faith—or was it the courage?—to follow our own predictions and cut back as much as we should have."

THE AUTHOR • Melvin J. Goldberg, a business writer specializing in economics and finance, edited the Prentice-Hall newsletter *Information* for four years before joining the staff of *Medical Economics*. He has written widely for business and professional journals as well as for *Coronet* and other consumer magazines. His article "Industry Fights Back on State and Local Taxes" appeared in the April issue of DR&MI.

Good forecasting, of course, pays off in good times as well as bad. "We really cashed in on the 1956 boom because of our business forecast," says the president of a gear and coupling company. "We increased our personnel and inventories in time, subcontracted for more help, and met every production deadline as it came along."

"Our 1956 general business forecast was the factor that made us decide to build two new factories and scrap our obsolete facilities," reports the president of a major ceramics producer. "It told us of a big and growing market, right in the area where the plants were to be located. Sure enough, it was true."

Of course, not all companies report such easy and happy results with their business forecasts. A number are dissatisfied with the accuracy of the forecasts prepared in their companies. "Not specific enough," "too iffy," "only a guess," are some of the complaints.

"What's a forecast worth when one fool action in Washington can upset everything?" says the president of an industrial sewing machine manufacturer. "We're pretty good at explaining what happened," says a textile company, "but whenever we look into the future our crystal ball gets a little cloudy."

Base for decision

Other companies find it difficult to translate general economic forecasts into concrete management decisions. "We've proved conclusively that our company follows the general trend of business with a six- to twelve-month lag," says the president of a large power equipment manufacturer. He is one of the lucky few. Many others have no such simple guide.

A machine tool manufacturer laments that his business leads the economy in general by about six months. "Our sales would make a fine forecasting guide for other companies," he says, "but that doesn't help us very much." A cotton cloth manufacturer says he accurately predicted the 1956 general business boom, but his industry still remained depressed.

Others of the answering companies are tied so firmly to the prospect of one or a few large industrial customers that they feel the general economic picture doesn't much concern them. A few others, who sell primarily to the Government, say they are even less affected by the general level of business.

What is the company presidents' final verdict on economic forecasting? At one extreme, the chief executive of a refrigeration equipment manufacturer says: "We don't allow any forecasting or fishing on company time. They're both a complete waste." At the other extreme, a few company presidents term economic forecasting indispensable.

The great majority of the presidents fall well within the middle ground. They find economic forecasts a useful tool, often a valuable one. All but a few companies say that their forecasts have at least paid for the time and effort it took to produce them.

At the same time, they warn against placing too much confidence in any prediction about the future and acting on it critically. They caution that the best of forecasts must be updated continually to be of much use.

"No kind of economic analysis can control the consumer's mind," says the president of a building materials manufacturer. "Forecasts are only an aid to business judgment, not a substitute."

END

SWIFT and SURE!

COOKE *personalized* service speeds products to markets—cuts your cost, raises your profits through *individual* solutions to your particular warehousing, transportation and physical distribution problems. 30 years a leader in public merchandise warehousing in the world's greatest distribution center! Unsurpassed in specially-trained personnel, methods, equipment and facilities! Write *today* for detailed brochure.

when time and money count, count on

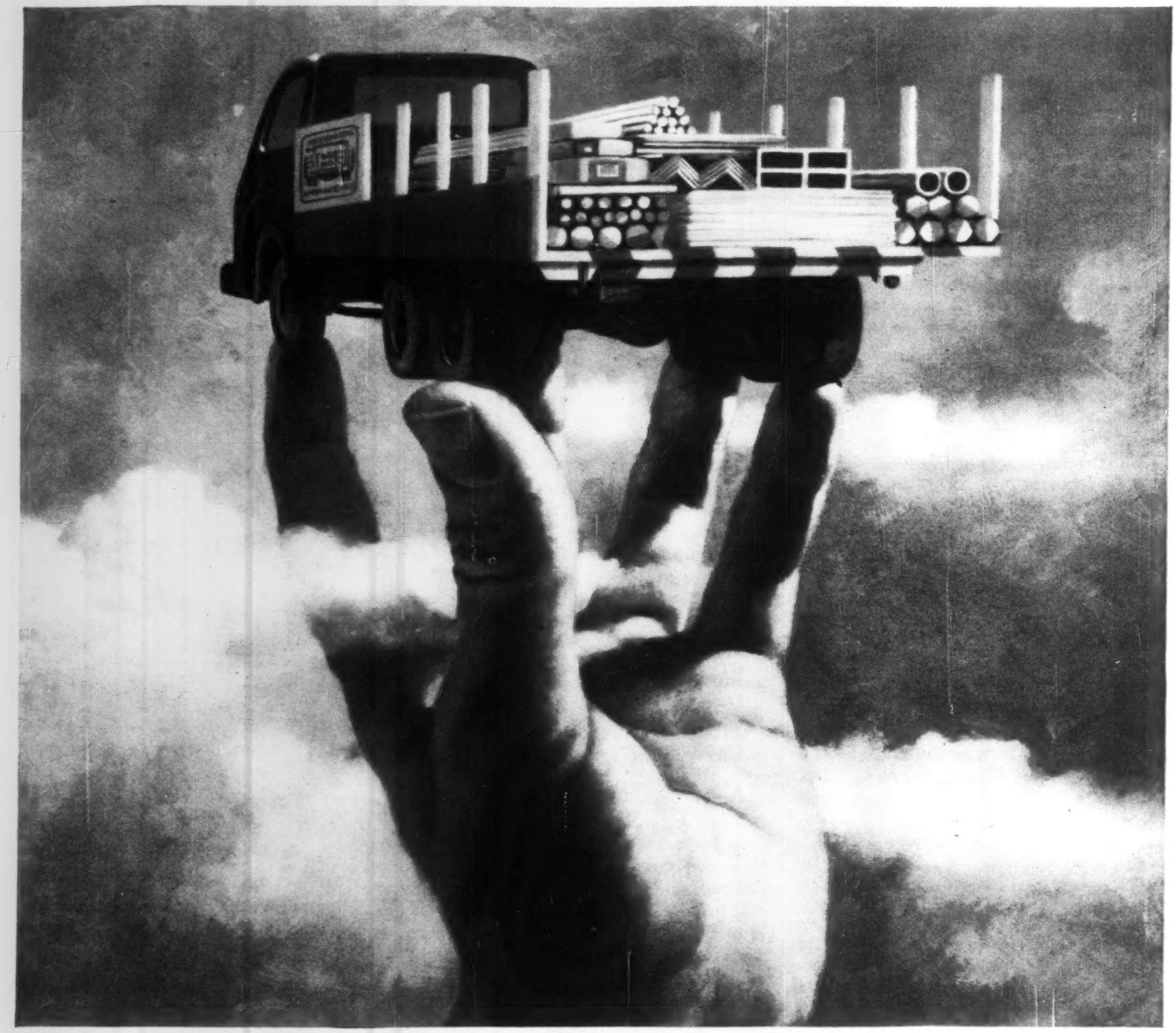
COOKE

J. LEO COOKE WAREHOUSE CORP.

JERSEY CITY & TRENTON, N. J.

PENN RR: 140 Bay St. Jersey City 2
Oldfield 3-5080 • WHitehall 3-5090
Whitehead Rd., Trenton 9 • JUniper 7-4646
ERIE RR: 12th & Provost St., Jersey City 2
Oldfield 3-5080 • WHitehall 3-5090
TWX: JC-112

EASTERN REPRESENTATIVES FOR:
North Pier Terminal, Chicago, Ill.
Encinal Terminals, Alameda, Calif.



At your fingertips

...a way to standardize, simplify, and save money with two Nickel alloy steels

Today, the metal-user has at his fingertips a way to standardize on manufacturing and heat treating processes. A way to simplify inventory. A way to cut production costs right down the line.

These opportunities are made possible by two Nickel alloy steels . . . AISI 4340, a through-hardening type . . . and AISI 4620, a carburizing-type steel.

Because of their unique combination of properties, the metal-user can use these two alloy steels to satisfy most of his engineering requirements. By doing this, he can standardize, simplify, and save money.

Both these steels are carried by Steel Service Centers from coast-to-coast ...ready for delivery on a "next door" basis. If you'd like a list of Steel Service Centers that carry AISI 4340 and 4620, write: Dept. 147G, The International Nickel Co., Inc., New York 5, N. Y.

©1958, T. I. N. Co., Inc.

INCO Inco Nickel

Makes metals perform better, longer

AMERICAN STEEL

WAREHOUSE ASS'N.

Inside Industry . . . **New methods, materials, and equipment**

Russian Plastics Drive Looms

ALSO: *Good News on the Fuel Front; Bubbled Bricks; Two New Motors*

WITH WESTERN aluminum and tin producers already suffering from Soviet dumping, free-world plastics and plastic producers may be the next victims of Iron Curtain economic warfare. Soviet production of various plastics is now running 25 per cent to 30 per cent of American totals and Khrushchev has announced all-out support for increased plastics production to 120 per cent of our totals. If Russian plastics production goes beyond domestic needs, they could easily upset world markets by dumping the excess.

The Russian plastics are comparable in quality to ours, according to Dr. Herman F. Mark, director of the Polymer Research Institute in Brooklyn and a top plastics authority, who has just returned from an extensive tour of Russian plastics research labs.

Dr. Mark showed a DR&MI editor some pens made in China from Russian plastics. Exact, inexpensive duplicates of American products, they should be flooding markets in a year, says Dr. Mark. He believes that chances of Russian plastics dumping are still five to ten years away.

The Russians are already manufacturing the newest plastics—high-density polyethylene, polypropylene, and high-temperature-resistant fluorine products. In many instances they have simply appropriated American patents without paying any license fees. However, in the case of synthetic natural rubber, Russian research antedated ours.

Another recent visitor to Russia, Thomas J. Kinsella, president of Plastics and Coal Chemicals Div., Allied Chemical Corp., New York, confirms Dr. Mark's analysis of Soviet plastics.

Oil from Shale

The growing Middle East crisis, with its threat to Western oil supplies, underlines the importance of some encouraging news on alternate energy sources. An improved process has been developed for removing oil from huge deposits of shale in the western United States.

Claimed to be 50 per cent cheaper than other processes, the new recovery system was perfected at Denver Research Institute for the Oil Shale Corp., Carson City, Nev. It could produce oil from shale at prices competitive with domestic oil, though not with low-cost foreign oil.

Equally encouraging is the news that conversations now proceeding between the English Electric Company and the major American companies in atomic power plant construction may help cut the fantastically high costs of achieving economic nuclear power. Along with its English competitors, English Electric has been concentrating on gas-cooled nuclear power reactors. Now it wants to trade know-how with its American counterparts.

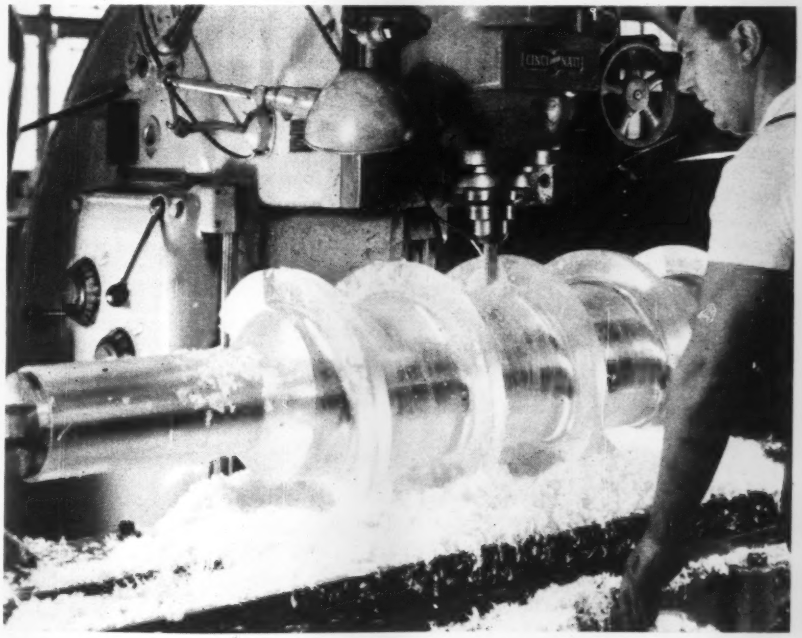
American companies have been working on a variety of power reactor designs, including gas-cooled types. According to Dr. H. S. Arms, the American-born chief engineer of E.E., his company has pulled ahead of American companies in gas-cooled designs by concentrating its efforts in this area. English Electric wants to trade this advanced know-how for information on the other avenues to cheap atomic power, approaches avoided by Britain because of the huge development costs.

WORKERS OF THE WORLD, DESCEND: *Drilling for bauxite deep under the Urals in what is claimed to be one of the largest bauxite beds in the world. Russia is using her rich ore position and accelerating aluminum output to upset Western markets.*

English Electric is building the reactor for the 500,000 kw Hinkley Point station, the West's largest.

Silica as a Foam

Foamed rubber, plastics, glass, and aluminum, already established in industry, have now been joined by a valuable new member of the bubbled fraternity —foamed silica. An excellent refractory, Foamsil—as the new product has been dubbed by Pittsburgh Corning Corp.—



AUGER-Y OF THE FUTURE: *Claimed to be one of the largest plastic pieces ever machined, this cylinder, made of Rohm & Haas Plexiglas, will become an auger in a pump designed to move highly corrosive slurries. The part is in a Cincinnati miller at Chemineer, Inc.*

DANGER
MEN
WORKING

DANGERS of launching a NEW PRODUCT

Snell Research can help overcome them

Here's how, in some typical case histories of Snell clients:

Product Research and Development—A few years ago Snell was retained to develop new products, applications, and markets for sugar. Extensive research and development work by Snell resulted in the creation of a new synthetic detergent—based on *sugar!*

Product Application—A Snell client in the paper industry, for whom we had developed a fine additive, wanted to explore uses in other fields. Unfortunately, their highly qualified staff's experience was limited to the one field. Snell, with experts in practically every product field, found the new product has potentialities as both a good emulsifier and a paint plasticizer. Only the very largest manufacturing companies can duplicate the breadth of experience and background the Snell "brain-trust" of technical experts can offer you!

Product Improvement—One Snell client found their product, an adhesive bandage, slipping in quality. Tape was going gooey in storage on druggists' shelves. Snell research helped this client bring his product quality up to equal the best on the market, and retain his share of sales.

Product Evaluation—A Snell brewery client wanted to expand production and take advantage of a more efficient production technique but feared the taste of the beer might suffer. Snell food technologists, taste panels, and engineers checked the new process and hundreds of samples of beer made under new and old systems, recommended the switch to the more profitable modern process. The change went unnoticed by the customers, and sales continued to climb.

Market Research—A Snell client with a waste product had briefly considered building a plant to use it to manufacture another product; but had given up after their own brief survey showed the new product to be already overproduced. When they consulted Snell for checking, however, Snell predicted there would be a shortage within three years. The client waited two years, built the plant—and now has a profitable new product instead of a waste!

Toxicology—One of the largest frozen food companies began getting complaints on the flavor of one of their green vegetables. Since hundreds of thousands of dollars were at stake, they consulted Snell to find out what was wrong. Snell by analyzing tests, and checking on the farm, was able to prove that the taste—actually toxic—was due to a new type of insecticide sprayed on the fields hundreds of yards away on a windy day long before the harvest!

Engineering—A large midwestern firm desired to produce its own brand of instant coffee, to possess outstanding flavor, body, and bouquet. They engaged Snell to handle all details, from design to engineering, to supervision of actual process startup. The fine qualities "built into" this resultant product made it such a success that Snell was commissioned to enlarge the plant, which has recently gone into production.

What's Your Product Problem?—Whatever it is, and whatever your product field—chemicals, chemical specialties, personal products, pulp and paper, protective coatings, plastics, textiles, foods, petroleum, rubber—Snell has men who "know the score" in that field, and who can work with you creatively and profitably in developing, producing, protecting, and marketing new ideas. This broad experience can be decisive in protecting not only your ideas, but also the thousands of dollars you spend developing them. And the cost of Snell service is less than you might imagine! Half the jobs we do cost less than $1000!

SEND FOR FREE BOOKLET

Our brochure, "How to Develop Successful New Products," tells the whole Snell story. Why not send for it today? No obligation, of course. Foster D. Snell, Inc., Dept. D-9, 29 West 15th Street, N.Y. 11, N. Y.

FDS SNELL

New York, N. Y.
Baltimore, Md.
Bainbridge, N. Y.
Worcester, Mass.

also resists nearly all of the widely used, highly corrosive acids.

It also has great resistance to thermal shock within its useful temperature range—−450° F to 2,200° F. As light and watertight as balsa wood, the new insulating material cuts into useful shapes with an ordinary hacksaw.

Foamsil has a compressive strength of well over 100 pounds per square inch. Combined with its lightness, this means that supporting structures for hot acid tanks, reactors, and boiler furnaces can be much lighter and therefore cheaper.

Among the suggested applications for Foamsil are as a liner for stacks in chemical and power plants and in missiles. It costs 50 cents a board foot.

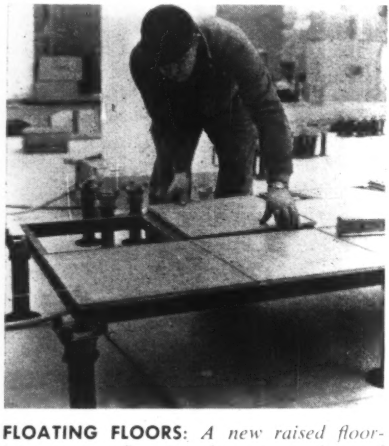
DR&MI has learned that another foamed material may soon hit the market. Corning Glass Works has made experimental quantities of foamed Pyroceram.

News in Motors

An AC motor with the variable speed characteristics of the DC motor and a servo motor only 0.3 inch in diameter are two recent developments.

Two English university professors invented the variable-speed AC motor, which has already been made in a one-horsepower size with a 300 to 900 rpm speed ratio. Metropolitan-Vickers is building a 200 hp version.

The tiny servo motor is a product of Dynamic Instrument Corp., Westbury, N.Y. Although developed for the Navy, it has many possible civilian applications, such as control of machine tools, and packaging machinery and even automatic dishwasher loading. —M.M.



FLOATING FLOORS: *A new raised flooring system offers an alternate to dropped ceilings where air conditioning ducts and/or heavy power lines have to be brought into an office, light industrial factory, or laboratory. Here a workman is dropping a cast aluminum plate into the module frame. The floor, made by Floating Floors, Inc., New York, can be rearranged.*

OBSOLESCENCE SURVEY
continued from page 37

types of missile work, but feels he cannot afford it. A third, now operating at 60 per cent of capacity, states that he will keep his old machinery working for him as long as it "can be operated profitably."

These companies are taking the obviously cautious course, practicing old-fashioned thrift. They may, of course, be acting wisely in the light of their own particular troubles and difficulties, but it is questionable whether the risks they run by *not* modernizing are not as great or greater than those entailed in spending the extra money. If the auto parts manufacturer waits until his orders outrun his capacity, won't some of his customers go elsewhere for quicker delivery instead of waiting for him to complete his modernization? In passing up the missile work now, may not the second man be allowing competitors to get ahead of him in an expanding market? And in operating old equipment until it becomes a measurable liability, may not the third man be passing up *extra* profits he might earn now and in the future?

Getting the money

Of course, capital financing for plant modernization is likely to be a big step for middle manufacturing. Where larger companies plan product development, plant equipment, and sales quotas on a five-year basis, the more numerous middle group operates on a year-to-year projection. Usually concerns in this group have limited cash or borrowing resources, and they may find equity financing difficult. Thus, they postpone capital improvements and try to "get along" with what they have, attempting to make up in tight plant supervision for sluggish machine effort.

A manufacturer of sheet metal operating at 75 per cent of capacity, who is delaying his modernization program because there is not enough additional business or savings in sight to warrant the expense, offers this comment, for example: "We have been successful, in getting better results from present equipment, due to a more responsive attitude by labor. Layoffs in the neighborhood have encouraged employees to work a little harder, and the unions are going along with management."

It is often difficult to recognize the meaning of obsolescence through the financial mirror of the balance sheet, unless it is compared with general sales and profit trends and competitive companies and similar industries. The manufacturer who is standing still or losing money may seek consolation in the fact that his competitor is in the same boat, and in justification use dark glasses

"WORTH THEIR WEIGHT IN GOLD"

One of more than 90 HY-TEST SAFEty SHOES, OXFORDS and BOOTS for Men and Women in industry.

The worker whose toes were protected in safety shoes at the time of an accident readily admits "they're worth their weight in gold". He has walked away from expense to himself in loss of time and income.

Equally important, he has walked away from expense to his company in loss of production and unnecessary compensation costs. That's why management and supervision are encouraging employees to wear HY-TEST SAFEty SHOES.

Here are safety shoes so well-designed they're worn by many on-and-off the job. *Gone* are the old clod-hoppers. HY-TEST has built *style* and *comfort* into today's safety shoes, and added its *"ounce of prevention"* . . . the famous, patented Anchor Flange Steel Box Toe. Wearers can't tell them from regular shoes *. . . until they save their toes!*

Do you have an organized safety shoe program in your plant? If not, we suggest the HY-TEST SAFEty SHOES Plan. It proves that safety shoes are "worth their weight in gold" . . . to you and your employees. Write or wire today.

HY-TEST SAFEty SHOES
Division—INTERNATIONAL SHOE COMPANY
509 Washington Ave., St. Louis 3, Mo.—Teletype SL 300
927 N. 3rd St., Philadelphia 23, Pa.—Teletype PH 476

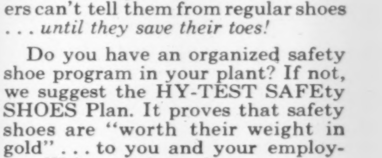
25 YEARS OF PROGRESS
WORLD'S LARGEST

HY-TEST
SAFEty SHOES FOR EVERY NEED

In 106 Cities—
NO ADDRESS IS COMPLETE
Without a Postal Zone Number

The Post Office has divided 106 cities into postal delivery zones to speed mail delivery. Be sure to include zone number when writing to these cities; be sure to include your zone number in your return address—after the city, before the state.

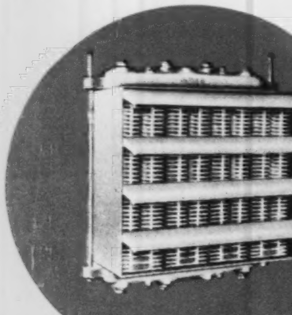
THE "WHIPPET" MARKER



Automatically dates, codes, or marks production runs of cartons, packages, filled bags, boxes, rolls, cans, etc. For candy manufacturers, food packers, distillers, oil companies, etc. Send for free catalogue.

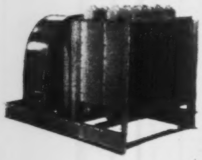
THE INDUSTRIAL MARKING
EQUIPMENT COMPANY, INC.
655 Berriman Street, Brooklyn 8, N.Y., Dept. DR

Corrosion IN HEATING EQUIPMENT Ends . . . when you install



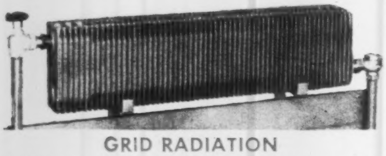
GRID CAST IRON STEAM HEAT TRANSFER SURFACE

You eliminate internal electrolytic corrosion because all metals in GRID Cast Iron Steam Heat Transfer Surface in contact with steam are similar . . . not 2 or 3 different metals that promote corrosion to cause leaks and breakdowns. GRID Cast Iron Steam Heat Transfer Surface eliminates external corrosion because its cast iron construction resists acid fumes in the air. When corrosion in heat transfer equipment ends, maintenance ends.
GRID Cast Iron construction eliminates the use of reducing valves where high steam pressures are used. It is designed to withstand steam pressures up to 250 P.S.I. . . . 450° temperature. GRID Cast Iron Steam Heat Transfer Surface does away with replacement costs because GRID is built to last for years . . . operating successfully without maintenance in many plants since 1929.



GRID Blast Heaters

Shown In Fan Assembly . . . a rugged, strong, economical heat transfer surface designed for the tough job . . . for low and high steam pressures . . . require less work for installation and less cubical space.



GRID RADIATION

Designed for the tough applications in conjunction with high steam pressure systems . . . will withstand steam pressures up to 250 P.S.I. . . . particularly adaptable for shop offices, store rooms, laboratories, etc.

Write today for the complete story on GRID Unit Heater, GRID Blast Heater and GRID Radiation for industrial plant use.

D. J. MURRAY MANUFACTURING CO.

Manufacturers Since 1883

WAUSAU • WISCONSIN

where the facts belie his pessimism. This appears evident at times in the survey.

The need for better definition of the meaning, penalties, and risks of obsolescence is, in fact, most pronounced in the medium-size manufacturing group. Some need to learn that going to the bank for a capital loan is not necessarily an admission of managerial weakness—that it may, in many cases, entail less risk than waiting until modernization can be financed out of reserves.

On their toes

The market for new plants and equipment is by no means dead in this group of companies, however. Many have expanded or improved their facilities recently, and two of every seven plan some major or minor modernization this year, including a number of those who have no equipment that is actually obsolete. And almost 40 per cent of the plants in which 10 per cent or more of the equipment is obsolete plan to modernize. As might be expected, the larger concerns, with sales of $10 million and up, are more consistent planners and have set better accelerating and braking controls over capital expenditures, gearing them to sales projections. But many of the smaller ones are alert to the dangers of obsolescence also.

Most active in modernization this year appear to be the metal industries. Half the primary metal manufacturers plan to install new equipment. Three-fourths of the metal fabricators, exclusive of those in machinery and transportation equipment manufacturing, plan important additions and deletions in their factory installations. And four out of ten machinery manufacturers expect to buy new power tools or acquire other facilities for improved technology. Consider these specific companies:

- A plywood company now operating at close to capacity is investing in new log chippers and veneer driers at a cost equivalent to one-eighth its annual sales volume, which is in the $2-$5 million range. Management figures the modernization will cut costs 10 per cent.
- A manufacturer of instruments, who has no completely idle equipment, plans to expand capacity between now and mid-1959. He will spend $2 million—again, one-eighth of the sales volume—on the expansion.
- In the textile field, where obsolescence has been a serious drag on progress, a processor of cotton yarns with annual sales in the $10-$20 million range reports that a continuing program of modernization has cut costs and placed the company in a strong competitive position.
- A manufacturer of textile equipment, with sales of $20-$30 million, faced up to a serious challenge of obsolescence, and despite improvements still operated with 65 per cent out-of-date machinery. But management plans to spend 12 per cent to 15 per cent of 1958 sales for additional space and equipment.

Watching the headlines

Nearly all larger concerns have a keen news sense and are aware of the over-all shifts in world developments that will bear on their sales.

A manufacturer in the construction field with annual sales approximating $25 to $30 million has 20 per cent obsolescence and is willing to replace old equipment, but is waiting to study building conditions and Government estimates on road construction.

Some companies are waiting for better indications of auto sales for 1959, because of the volume of steel, glass, textiles, rubber, and various nonferrous metals required; others are willing to believe that 1959 is certain to be a year of inventory replacement and stepped-up consumer sales in autos, and are going ahead with re-tooling plans and plant modernization to be ready for the increased volume.

The philosophical attitude of management is reflected in several interviews. The head of an abrasive company with one-fourth of his factory potential idle and production running at

65 per cent of the current production unit rate based on a two-year average, stated in essence: "The recession is a healthy pause in growth. It gives us time to study the over-all situation and review conditions in the plant and among the personnel. It is an opportunity to make improvements that cost nothing."

An evident damper on modernization is the prospect of faster turnover without an adequate profit margin for the increased capital investment. A manufacturer of food products says, "Complete replacement of less efficient equipment would call for considerable outside financing, which the company is unwilling to undertake at this time because of small margin of profit." Another metal processor, operating at full capacity with 18 per cent of its facilities obsolete, defers making replacements "because of the slight profit improvement to be realized."

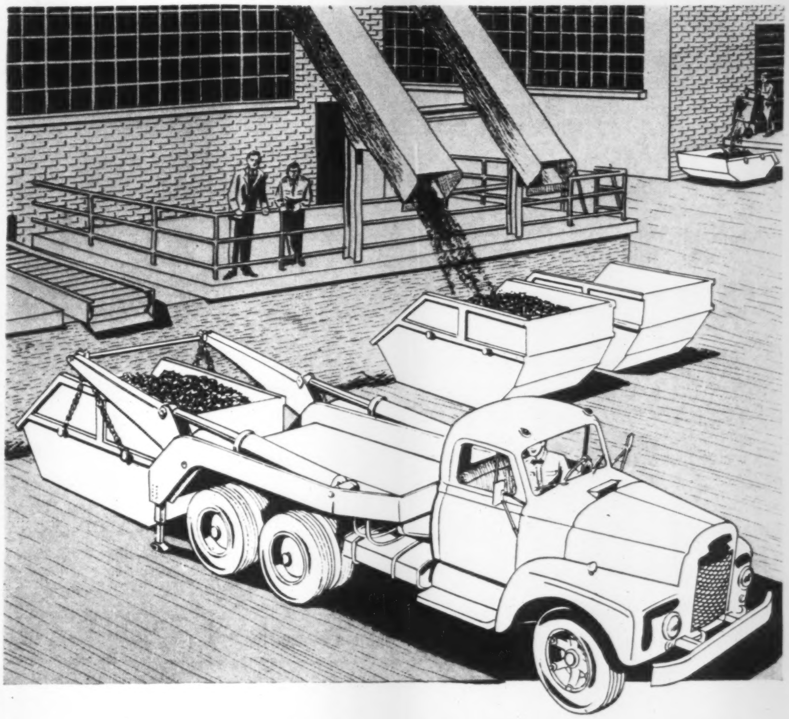
What is obsolescence?

When is a machine obsolete? When it won't earn its keep, certainly, and perhaps also when a new machine would provide more profit in the long run. When is management obsolete? When it walks backward in self-justification, and refuses to face up to present and future requirements. It is easy enough to replace machines, but it often takes a severe jolt to arouse a sluggish management to decisive action.

Actually, the survey suggests that management is reasonably alert to the dangers of obsolescence, and the point of decision is the delicate balance between excessive plant investment and slow-motion facilities that increase costs and absorb profits. Management's skill and courage in leadership are tested at this critical juncture, for it is often the point of no return.

All in all, the survey indicated that three-fourths of the manufacturers whose sales hover about $10 million or better, and whose plants are often key industries in the community, are "doing all right." They are meeting the problems of a depressed market with management ingenuity in all departments—engineering, production, and sales. They are facing up to the challenge of obsolescence, and are not panicked by the second-hand observations of business publicists.

While comments are too numerous to quote, a general summation of the tenor of the opinions of the top three-fourths of the companies surveyed might be this: "Yes, competition is rough and tough, but it is a good test of stamina, and we expect to harden a few muscles in the contest. We are modernizing, but we're not going to the hockshop to do it. We're cutting costs but not where it hurts. We aim to stay in business, and at a profit. —A. M. S.



How big a bite does materials handling take from your profits?

Materials handling is a *cost,* reflected in your company's break-even point. The greater the variety of materials, the greater your need for various types of equipment, and attendant investment and operating costs.

The Load Lugger System helps you increase plant productivity and reduce the cost of handling materials of all kinds — in-process, by-products, parts, bulk, rubbish, sludge — solids, liquids and gases. Because a single Load Lugger truck and its driver can handle dozens of patented steel Load Lugger containers designed for these materials, your equipment investment and labor needs are less.

HOISTS IT

HAULS IT

DUMPS IT

LOAD LUGGER ®

BW

Send for full information about the advantages of this versatile handling system.

LOAD LUGGER, INGERSOLL KALAMAZOO DIVISION
BORG-WARNER CORPORATION
1969 North Pitcher Street, Kalamazoo, Michigan, Telephone Fireside 5-3501
EXPORT SALES: BORG-WARNER INTERNATIONAL CORPORATION, CHICAGO

LEASE for Profit

SWITCH FROM "SAVING" TO MAKING MONEY!

Why burden yourself and your executives with the countless details of an *unproductive* department—the purchase and care of your trucks?

Leasing your trucks the "NATIONAL" way doesn't cost, it *pays*. That's because you immediately have top executive time available for the profit-making departments of your firm.

You add truck experts to your staff, *but not to your payroll*. You gain both executive time and *capital*.

Do as other profit-minded truck users; plan now to change over from ownership to leasing . . . the "NATIONAL" way. *For facts* about truckleasing, write:

National® TRUCK LEASING SYSTEM
Members in principal cities in the United States and Canada
23 E. JACKSON BLVD., SUITE D-9 • CHICAGO 4, ILLINOIS

FAST IMMEDIATE COST CUTS

ON YOUR LOADING DOCK... Right Now!

WHEN YOU PUT MAGLINER MAGNESIUM DOCK BOARDS ON THE JOB!

Magliners hurry loading . . . get materials in and out of carriers in less time . . . for less money. Fast, safe, *jarless* crossover for men, loads and equipment! Built to last longer, Magliners stand up under the heavy knocks and pounding of power-truck traffic—give longer service life, more for your money! Put Magliner Dock Boards to work for you on *your* dock.

START SAVING TODAY! Write for new bulletin, 'Difficult Dock Problems and How to Solve Them'

Magline Inc.,
P. O. Box 39,
Pinconning, Mich.

MagLiner MAGNESIUM DOCK BOARDS

Canadian Factory: Magline of Canada Ltd., Renfrew, Ontario

reliability

If you can't afford a heating equipment failure, reliable Reznor gas unit heaters are your best buy. Reznor, consistently the leader in unit heater sales, also leads in high standards of quality for design, workmanship and materials to insure long life and reliable service.

RELIABILITY is only one of many reasons why these completely-automatic packaged units are ideal for primary, supplemental or replacement heating in all kinds of commercial and industrial buildings . . . large or small.

Ask your Reznor distributor or dealer for complete details. You'll find him listed under "Heaters, Unit" in the Yellow Pages.

REZNOR
WORLD'S LARGEST-SELLING DIRECT-FIRED
UNIT HEATERS

Reznor Mfg. Co., 80 Union St., Mercer, Pa.

EXECUTIVE BOOKSHELF

Brief Reviews of New Business Books

Uncle Sam's Big Stick

ANTITRUST POLICIES *by Simon N. Whitney. Twentieth Century Fund, 41 East 70th St., New York 21, two volumes, 1,101 pages, $10.*

An ambitious pioneering study of how antimonopoly legislation has affected competition in twenty industries. The author is now chief economist of the Federal Trade Commission, but his book is not a statement of Government policy.

Sizing Them Up

IMPROVING MANAGERIAL PERFORMANCE *by Virgil K. Rowland, Harper & Brothers, 49 East 33rd St., New York 16, 167 pages, $3.50.*

Executive development via formal performance appraisals, authoritatively described in brisk, cogent style.

When Celebrities Sell

THE BIG NAME *by William M. Freeman. Printers' Ink Books, 100 Garfield Ave., New London, Conn., 230 pages, $3.75.*

Lively, informative account of the uses and abuses of testimonial advertising from the Gay Nineties to the present day.

Top Management Manual

THE PRENTICE-HALL PRESIDENTS' GUIDE. *Prentice-Hall, Inc., Englewood Cliffs, N.J., $35.*

A big (4.5 pounds, 1,400 pages) and informative compendium of practical advice on everything from company cost cutting to personal fortune-building and tax strategy.

Overseas Profit Opportunity

THE EUROPEAN COMMON MARKET. *American Management Association, 1515 Broadway, New York 36, 220 pages, $6.*

American and European experts analyze the meaning of the ECM to U.S. management. Specific company plans are included.

Halls of Ivy

AND MARK AN ERA: THE STORY OF THE HARVARD BUSINESS SCHOOL *by Melvin T. Copeland. Little, Brown and Company, 34 Beacon St., Boston, 368 pages, $6.*

Readable history of America's most influential college-level business school.

EXECUTIVE AGE AND RETIREMENT

continued from page 41

energy, drive, and enthusiasm as drawbacks on the job.

Age may, in some cases, be related to job performance and productivity, although many presidents insist that productivity varies with individual health, experience, emotional maturity, and job demands. But among the nine out of ten industrial leaders proposing a figure, the consensus is that an executive is most productive between the ages of 40 and 60.

Age may be a hiring factor for considerations other than productivity. Among DR&MI Panel companies, 65 per cent have no age limit for hiring executives, compared to 35 per cent that do fix some limit. Only infrequently, according to the surveyed presidents whose companies set no formal policy, is an older executive brought in from outside to become a full-fledged member of the top management team.

Where age restrictions are set, executive hiring policies are determined primarily by two factors: a new executive would take too long to train and, when he began to produce, would give the corporation too few productive years. The dollar sense of this policy is succinctly stated by the president who says it's based on "the cost of training vs. payout time."

Almost as frequently, companies set age limits on executive hiring to reinforce their policy of advancement from within, "based on sound recruiting at lower levels." "Our program for training and promotion of young executives would be seriously impaired if we hired outside executives in the same age group," says one man. Several others mention that a restrictive executive hiring policy makes it mandatory to train the home team on home ground. Repeatedly, presidents say, "We try to build them—not hire them."

Another commonly mentioned reason for not hiring older executives is the prohibitive company pension costs —or the reduced incentive that may result from automatically lower fringe benefits.

Potential psychological problems may be a factor. "Beyond a certain age," one president says, "it is difficult to integrate the individual into the organization." Another pins the age down: "We believe a man after 45 has his way of life and habits pretty well set, and it is difficult for him to learn a new company's business."

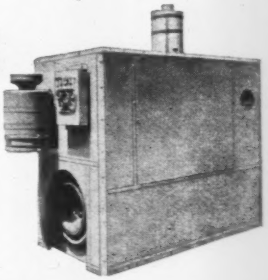
The second level

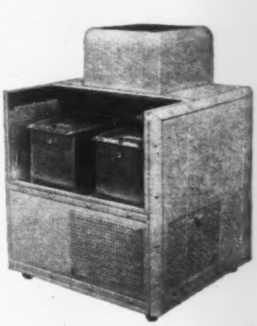
In the larger industrial companies typical of the DR&MI Panel—three out of four of the companies are among the 500 largest in the United States—the

Planning a plant in New Jersey?

If you are planning to take advantage of New Jersey's incomparable advantages for industry, The National State Bank of Newark can be extremely helpful with its knowledge of the opportunities offered in the Newark area. Our 18 banking offices and ample resources offer you every banking service. And our 146 years of experience in helping New Jersey business grow is at your service! A National State representative will gladly call, if you wish. Write to our Business Development Department.

The FOUNDED 1812
NATIONAL STATE BANK
OF NEWARK
810 Broad St., Newark 1, N. J.
Member Federal Deposit Insurance Corporation





CUT HOUSING AND ENCLOSURE COSTS WITH LINDSAY STRUCTURE!

NO expensive dies
NO skilled workmen
NO special tools or machines

And, easy-to-assemble Lindsay Structure components have proved their efficiency in thousands of different applications. The versatility of Lindsay components permits adaptation to unusual shapes, and allows for elasticity in design.

In planning housings or enclosures, it will pay you to consider the use of Lindsay Structure — whether for pilot model or production run. Lindsay Structure is available in any workable metal. Any length, width and height are possible in fractional dimensions using the 80,000 stock panel sizes available.

Product uniformity is assured with Lindsay Structure . . . assembly can be done without special training . . . and production started immediately.

LINDSAY STRUCTURE DIVISION
INTERNATIONAL STEEL COMPANY
1435 Edgar Street • Evansville 7, Indiana
Canadian Affiliate: Lindsay-International, Ltd.
Port Credit, Ontario

Write for specific information about the use of Lindsay Structure components on the job you are now planning. Or send single-line drawing for cost estimate.

Because this has what it takes...

The rugged durability and extra value (Timken tapered roller bearings in every wheel, spring loaded non-kicking handle, slide planes for easy pallet entry and 360° lifting radius as standard) of the REVOLVATOR Red Giant hand lift pallet truck (above) has built a reputation which means that...

Red Giant
Hand Lift
pallet truck

We were called on to do this...

Explosion-proof
High-lift
Go-Getter

One of six basic models . . . REVOLVATOR Series 54.00 Go-Getter for use in explosion hazardous areas for chemical and related companies with Class I Group D or Class II Group G hazards designed at the request of one of the country's leading safety authorities. This electric lift truck meets requirements for both hazards and utilizes screw type housings hydrostatically tested to pressures far beyond those required. Additional safety feature—hydraulically operated disc brake.

Therefore: Whether you need a standard piece of material handling equipment or specially designed equipment, call on

REVOLVATOR CO.
8702 TONNELE AVENUE, NORTH BERGEN, N. J.

president manages his company through a team of nine immediate subordinates whose ages range around 52. Actually, the individual teams may have as few as two or as many as twenty subordinates. But regardless of the span of control or the average age of the reporting subordinates, 91 per cent of the presidents believe the average age of their team is "about right," compared to 8 per cent who say their team is too old and 1 per cent who call the team too young (see chart on page 41).

But while the executive age factor usually seems to be no handicap to the successful management of the company, it does happen occasionally that an older man starts to slip. What then? Does the company take any action in the case of a long-service executive, several years from retirement, who has begun to "coast"? Two out of ten presidents report that they have never been faced with this problem, or that the company takes no specific action when the problem does crop up occasionally. "We condone and encourage a certain amount of coasting," says one president.

But others meet the problem with persuasion, discipline, or other means—though they rarely take drastic action immediately. "We try to stimulate the executive's interest and participation," says one president. "But if all fails, we may demote, reduce pay, place in a consulting capacity, or retire him early."

Such a series of progressive steps is the most common procedure reported by the company presidents. Many relieve a slipping executive of his responsibilities, transfer him to a staff job, or leave him where he is and move an understudy in more quickly. Sometimes demotion, lower pay, elimination of bonus, and temporary leaves of absence are used to reinforce the "reduced scope of authority."

Often early retirement is recommended after more responsibility has been shifted to the successor, but there is considerable latitude between the practice of the companies that believe in "retiring the executive at once" and those that merely "precipitate" early retirement or first try to "revitalize" the man and then, as a last resort, "suggest or force early retirement"—in some cases with an offer of "full pay," but more often at a "reduced pension."

The president's successor

Few realities are more difficult for the company president than the knowledge that some day another man will have his job. And probably few decisions are more difficult or important than determining the man best qualified to succeed to the president's job. While the choice may not always be theirs to make, four out of five presidents on the DR&MI Panel say they have, in their own minds, selected one or more probable men as their own successors. The rest have not yet considered or made any tentative or final choice.

Recognizing the importance of protecting management continuity against illness, death, and debility, the consensus of the Panel seems to be that around 50 an executive should begin training his own successor. A sizable minority say the coaching should begin "the day the executive takes on a new job." Others consider other factors play a larger role than age in the decision. "This question of training a successor is hard to answer," says one of these men. "In some circumstances, one individual will clearly be head and shoulders above anybody else and may very well operate as an executive vice president for a period of several years. However, where there are three or four individuals who might be a successor, it would seem to be unwise to make anyone crown prince too early in the game."

More than half the Panel—52 per cent—say they have no definite policy requiring executives to spot or train successors. But 30 per cent of the presidents say their companies require executives to identify and train potential successors immediately or continuously. "No executive is any better than his assistant," says one supporter of a continuous-training policy.

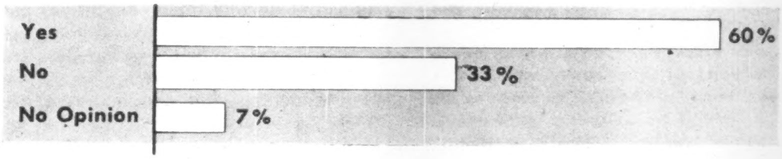
Some companies—about 10 per cent of the Panel—set up specific successor training programs from two to ten, and sometimes more, years before the executive's expected retirement. The others have some kind of successor training policy, usually of an informal nature.

Is retirement mandatory?

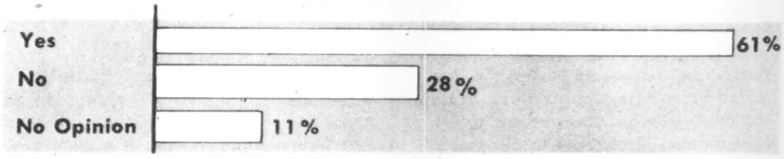
The National Industrial Conference Board distinguishes three types of retirement policies in company pension plans: discretionary, automatic (where the employee only continues working with management approval), and mandatory. But in their application, NICB discovered that companies made many exceptions to these policies, so that some which were in principle "automatic"

AGE, HEALTH, AND THE U.S. PRESIDENCY—
WHAT THE PANEL THINKS

Should a top age limit be set for U.S. Presidential candidates?



Should minimum health requirements be mandatory?

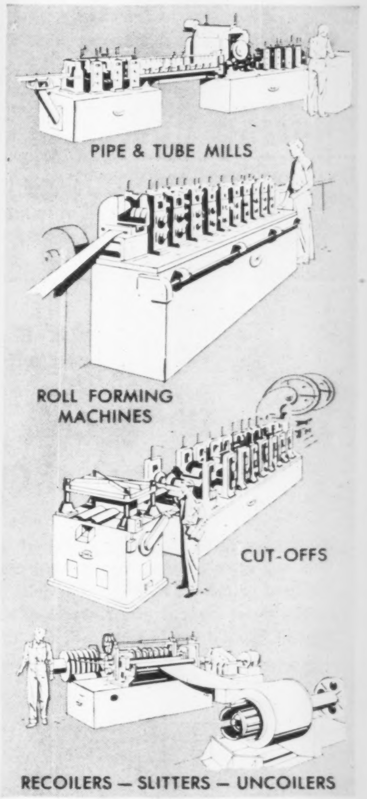


With his first-hand knowledge of what it takes to run a large organization, the company president often has clearly formulated views on whether or not a top age limit should be set for U.S. Presidential candidates. Exactly three-fifths of the top executives on the DR&MI Panel believe that some definite limit would be desirable. Others say that while "in theory this is a highly desirable need, in practice it would be difficult to administer."

About one in ten men propose a specific age limit for Presidential candidates, ranging from 50 to 70—and averaging out to almost 63. (Had such a limitation actually been in effect in 1952, Eisenhower would have squeezed comfortably under the wire: he celebrated his sixty-second birthday less than a month before the election.)

An exact third of the Panel are flatly opposed to any age limit for candidates. They reason their stand like this: chronological age is not necessarily related to vigor, ability, and usefulness; the electorate has an option every four years to change its mind as well as the man in office; and the candidate himself should decide on his own fitness to run.

Setting health limits would be even more of a problem, most company presidents think, although nearly four out of ten favor the principle. Many panelists believe that it would be impossible to establish "a fixed rule about minimum health requirements, but obviously a man in poor health shouldn't run." Health, the Panel presidents often point out, cannot be made subject to legislation. Only a few would favor a rigorous health check, saying that a Presidential "candidate should be eligible for unrated life insurance." Or, "Minimum health requirements are necessary for the management of a corporation; they should also apply to the largest business in the world."



YODER
MAKES THEM ALL

. . . Complete equipment lines for heavy or light production!

Uncoilers, slitters, roll-forming machines, cut-offs, pipe and tube mills, special machinery for ferrous or non-ferrous metals are all made and engineered by Yoder to fit your specific requirements.

Special attachments and auxiliary units can perform additional operations such as welding, coiling, punching or embossing without extra labor cost while increasing production speed.

Let Yoder engineering and "know-how" help you get the most from your plant . . . with Yoder equipment. For full details, write to:

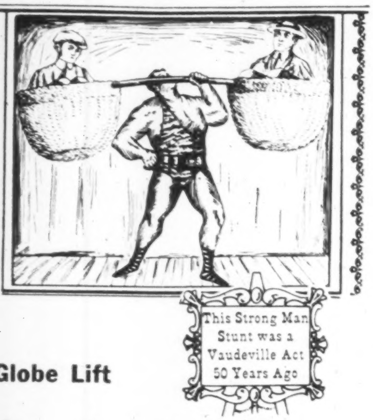
THE YODER COMPANY
5531 Walworth Ave. • Cleveland 2, Ohio

ENGINEERING YODER MANUFACTURING
PIPE AND TUBE MILLS
(ferrous or non-ferrous)

Marvelous
Manifestation of
Matchless
Muscularity

HUMAN DUMB-BELL

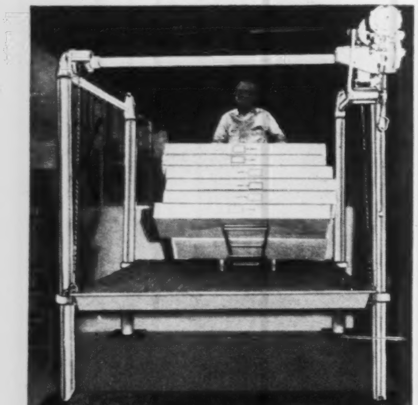
USED IN HERCULEAN
ONE-HAND LIFT

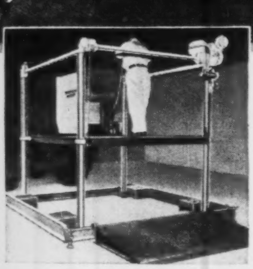

This Strong Man Stunt was a Vaudeville Act 50 Years Ago

Today, any worker is a Hercules with a Globe Lift

Heavy Lifting, Quick Loading, Easy Portability are features of GLOBE ELECTRO-LOADER

With one hand on the control of a Globe Electro-Loader, a workman can lift, load or unload heavy cargo quickly and without manual effort. Because no special foundation is required, this lift can be installed anywhere ... in shipping and receiving departments ... beside conveyors and machines ... alongside of raised floors ... indoors or outside ... upper floors ... temporary locations ... wherever rugged materials handling tasks are performed. Easy to install, can be quickly relocated.





For rigid permanent use, the Electro-Loader can be bolt-anchored to the floor or, it can be equipped with casters for fast movement anywhere in the plant. Platform is of checkered steel plate reinforced with steel beams to stand up under heavy impact loads of hand or power-operated trucks. A wedge-shaped ramp provides a gentle upward slope for easy roll-over or, the lift may be recessed for flush platform loading.

Lifting power for the Electro-Loader is supplied by a weather-protected electric motor operating a simple cable mechanism. Adjustable automatic top and bottom limit tops, a slack cable shut off, centrifugal governor and safety brake assure accurate control, smooth operation and complete safety throughout the entire lifting cycle.

GLOBE HOIST COMPANY DR-916-EL
East Mermaid Lane at Queen Street
Philadelphia 18, Pennsylvania

Please send me detailed information on Globe Electro-LOADER for ....
(describe application intended)
NAME ....
COMPANY ....
ADDRESS ....
CITY .... STATE ....

GLOBE® Electro-LOADER
PLANTS DES MOINES—PHILADELPHIA—LONG BEACH, CAL.

GLOBE HOIST COMPANY
East Mermaid Lane at Queen Street
Philadelphia 18, Pennsylvania

and flexible were in fact mandatory, and that in a number of "mandatory" policies, exceptions were made so frequently that they were mandatory in name only.

The over-all company retirement policy, moreover, may not apply with equal firmness to executives. But three-fourths of the Panel presidents report that their companies do have a mandatory retirement age for executives. Some companies report permitting "rare exceptions," others that an "executive committee may act annually on requests for deferred retirement," or that "flexibility is maintained."

In principle, 79 per cent of the Panel favor mandatory retirement. Many dislike the rigidity of a mandatory policy, but believe it is the fairest way to prevent favoritism by exception and to ensure the morale of younger executives by periodically opening up the chain of promotion. Comments one president: "Probably the best over-all solution to a complex problem, even if it means occasionally losing a good man—at least until we know we have a better-balanced formula for judging productive age rather than calendar age."

Retirement policies are sometimes useful to meet other company needs, especially the option for premature retirement, which may be invoked by either the executive or the company. When good executives are hard to get, as in boom or war times, executives past normal retirement age are often kept on the staff, even when they are less efficient. But during a slump, companies will sometimes favor premature retirement as a way to cut costs. Still, the 1957-58 recession seems to have forced a step-up in executive retirements in only three out of ten of the big industrial companies on the Panel.

Easing executive retirement

Whether it happens automatically or by company or individual choice, retirement is seldom if ever fully prepared for. Compulsory leisure has such a severe impact on some retirees that the resulting condition has earned a name—"retirement shock." Larger companies have, for some time, acknowledged their responsibility to protect employees to some degree financially against the shock of the sudden drop in income that retirement usually brings. More recently, many companies have begun to assume other, more intangible responsibilities—to prepare employees psychologically for retirement and to help them in other ways after it. At lower employee levels, counseling has come into increasing use.

But at the top management level, easing retirement is necessarily more complicated and more subtle. Many presidents believe that the "knowledge that retirement is mandatory leads executives to make the adjustment themselves," or that individual "circumstances and desires" are sufficient for their own transition. One president remarks rather sardonically that the company has "no special plan—we find that most executives start relaxing too soon to need help in the transition."

But about one out of ten Panel companies eases the executive's workload somewhat before his retirement, and about as many hire him as a part- or full-time consultant after retirement. Before he leaves, he is often re-assigned to other duties—frequently shifting him from line responsibility to staff duties. In some cases, where lower pay may accompany the lightened responsibility, the company protects the executive against a lower retirement income by exercising a common pension option: basing the final pension formula on a higher pay period terminating several years before actual retirement.

Longer vacations, too, have been increasingly used to pry an executive loose from his responsibilities and compel him to practice retirement partially, with systematically longer vacations required in each ensuing year. In effect, the executive goes through a dress rehearsal for his post-retirement life. For example, one Panel company requires executives at the age of 65 to take a one-month vacation in addition to their normal vacation. This increases to two months at age 66 and, at age 67, to three months "plus 11 weeks pre-retirement education" with sessions taking up four and a half hours a week.

As the lifespan grows

Fully 50 per cent of the presidents believe that business may be forced to change its present retirement policies as a result of the lengthening lifespan.

Many presidents suggest that the retirement age will be increased three, five, or even ten years beyond the most commonly accepted present age of 65. If the lifespan increases substantially, many men say, the cost of pension plans might become prohibitive to the company, as well as increasing the taxpayers' burden, so that later retirement may be the most satisfactory solution to control costs from several points of view.

Opinions vary widely. Some company presidents believe that employee retirement dates will become more flexible; others, that they will become more mandatory, despite increased company cost. Increased employee resistance to retirement is foreseen by many men, as well as a possible "tendency to 'hang on' while diluting responsibility." Social problems come in for some mention. The business use of older consultants may also increase, many presidents believe. And some take the optimistic view that increased longevity would be "an advantage, as retirement will be enjoyed more fully because of better health."

It has often been pointed out that those closest to retirement like it least, and that those farthest from it give it the least thought. Attitude surveys made by such organizations as the research division of the Harvard Graduate School of Business Administration and the Owens-Illinois Glass Company back up this point. With Panel presidents' ages ranging from 29 to 72, it is to be expected that the prospect of retirement would vary in attractiveness to individual men. But this consensus emerges from the presidents' discussion of the personal aspects of their own retirement they most look forward to:

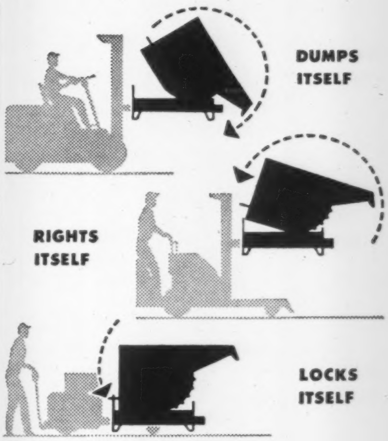
Attitude toward own retirement	% of Panel
An opportunity for other activities	45
Like the prospect of reduced pressure	18
Too far away to think about	17
Dislike the idea of retirement	6
Do not plan to retire	2
No opinion	12

Presidents in the majority group—who look forward to doing more of the things they have always wanted to do but have lacked the time for—anticipate such pleasures as increased travel, more civic activity, "spoiling grandchildren" and generally more opportunity to share fun and time with their families, and frequently starting a new career in business or politics. Others look forward to pursuing their hobbies—boating, golf, fishing, theater, reading, gardening, and photography, among other satisfactions. Several see their future cut out for them in "country life" on a ranch or farm. Some mention study, teaching, and writing for publication. A common view is this: "There are innumerable good uses for the free time of able men—I shall not lack good causes." And from their present vantage point, a large number of presidents look forward to "relief from intense and sustained pressure."

Not surprisingly, it is more often the younger presidents who say they have not yet thought about their own retirement—or that it is too far away to think about. "I am too young to think about it," says—understandably—a 29-year-old president. Says a 47-year-old man, "It is a long way in the future—I am not currently concerned." Another, 41 years old, says, "Ask me again ten years from now."

Personal problems

While it might be reasonable to assume that the typical company president would dread his own retirement, the industrial leaders take a remarkably healthy view of the day when they will step down. Four out of ten Panel members foresee no difficulty in adjusting to their own retirement, "assuming good



Cut scrap handling costs 50%

Use Roura Hoppers instead of barrels or boxes. It's a one-man operation. Pick up loaded Hopper with your own lift truck. Take it to freight car or scrap bin. Flip the latch and the Hopper dumps its load, rights itself, locks itself. Saves time . . . cuts costs 50% or more. Thousands now in use.

Ruggedly made of 3/16" steel plate with continuous arc-welded seams . . . in 5 sizes from ½ to 2 yards capacity with live skids or choice of wheels. Also available in stainless steel or galvanized. Immediate shipment of standard models.

ROURA
Self-Dumping
HOPPER

WANT DETAILS? Clip this coupon to your letterhead and mail to

ROURA IRON WORKS, INC.
1404 Woodland Ave., Detroit 11, Michigan

BUSINESS OPPORTUNITY

Building material business in North Texas, one retail and one wholesale yard at separate locations. Combined sales more than $2,000,000.00 per year. Will sell both businesses at market value for inventory, trucks, machinery and equipment. Will require about $500,000.00 to handle. Will give long-term lease on buildings and real estate. Wonderful opportunity. Estimated net this year over $160,000.00 before income taxes.

H. E. DICKEY
3327 Winthrop
Fort Worth 16, Texas
Pershing 7-7285

Have You a New Address?

An early notice of change of address is helpful—it is usually necessary to have three weeks' notice. Please include the old address and your postal zone number and send the information to the Circulation Department,

DUN'S REVIEW and Modern Industry,
99 Church St., New York 8, N.Y.

planning to introduce your product to the CANADIAN MARKET?

call on THE BANK that's part of *every* part of Canada

There's a big, profitable market in Canada for many kinds of American products and services . . . if you first make the right arrangements. The Toronto-Dominion Bank has done the spadework that opened the way to successful Canadian operations for hundreds of Stateside firms.

Put your questions about plant sites—labor resources—transportation—customs regulations—trade connections—market figures—in the capable hands of "The Bank" . . . and its 500 branches, coast to coast.

Every business-building service you could ask for is yours to use at the bank that's called "THE BANK" in Canada. We would welcome an opportunity to serve you.

Write, call or wire Mr. F. G. Cleminson
Head Office: Toronto, Canada

THE TORONTO-DOMINION BANK

New York Agency:
28 Broadway, New York 4, N. Y.
Chicago Office:
30 W. Monroe St., Chicago 3, Ill.

health." Few go so far as the president who says, "I can hardly wait."

But about six out of ten panelists foresee retirement as causing some difficulties. Mostly, they are anxious about whether they can adjust readily to a lighter schedule. One president is afraid he will be at a loss for "what to do when they start that vacuum cleaner in the morning." More typically, the panelist worries about "adjusting to being less in demand and to relative inactivity," and about the "fear of feeling I am no longer useful."

On the financial side, some presidents are profoundly anxious about inflation, and the inroads it may make in the pension, savings, and investments that they have built up to make retirement life more comfortable. And a substantial number of presidents expect the hardest part of retirement will be leaving their business associates.

No place like home

In their retirement, many men plan to realize a long-delayed dream of travel, and a few plan to move to Mexico, France, or the Virgin Islands. But mostly they plan to stay "right where I am," and have "no intentions of getting too far from my present home base." Some presidents plan to move full-time into their present Summer or country homes—or to spend part of the year in Florida or California.

Not long ago, ex-President Herbert Hoover said publicly in Brussels, "You should not retire from work, or you will shrivel up into a nuisance . . . talking to everybody about your pains and pills and income tax." A good many Panel members agree. Frequently, these men plan other business ventures after retirement. From running large corporations as professional managers, some presidents plan to turn to small-business ownership. Some have already taken steps to do so. "I own three private companies, which I intend to keep," comments one president. Others intend to become consultants and continue directorships in their present and other companies. Some men plan to go into real estate or to return to such professions as law. Charity, church work, community service, and politics will also take up many presidents' retired life.

Of course, many men prefer to spend more time on their hobbies—which include music, painting, farming, fishing, golf, reading, and writing—and a good number have planned a schedule so full of activities that they are "too many to itemize." But whatever he does, whether for public service, profit, or pleasure, the company president has chosen a course of action to assure himself in retirement of a continued "pursuit of happiness." END

DEFENSE BUSINESS

continued from page 44

outfit achieved a satisfactory 45-55 balance (in favor of civilian sales) in one swoop, President Charles B. Thornton says, by buying Monroe Calculating Machine Company.

And usually when a company gains the balance it seeks through acquisition, it can at the same time achieve the type of organization that many business men consider most efficient for a balanced outfit—a structure in which military and civilian business are separated. Overhead charges for Government business can then be figured quickly and easily, red tape is localized, and security costs lowered.

Buyer's market

For the civilian-based company seeking to break into the military market by acquiring another company as a Government products division, right now is a good time to buy, in the opinion of most of those interviewed. A lot of small military-based companies are foundering, they say, because they were started by technical people long on inventiveness but short on business skill.

Where acquisition is not feasible, there are other possibilities for both civilian-based and defense-based companies.

Of advantage to the civilian-based company looking for more Government business is the fact that the Government dislikes to rely on a single source of supply and will sometimes require a long-time contractor to give a new supplier valuable production know-how.

Some civilian-based outfits have been able to land big Government production contracts by underbidding the companies that designed the prototypes under R&D contracts. While this technique has the virtue of allowing a company to get wet all at once, it is somewhat risky: you can bid too low and lose money in the end.

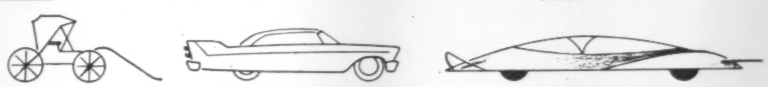
Less risk in subcontracts

A safer method is to seek subcontracts from established contractors. One big company executive says he prefers subcontracting anyway, because his experience has been that the prime contractors are more sympathetic than Government contracting officers when a subcontractor runs into a roadblock. As he phrases it, "When you go after subcontracts, you deal only with business men." (If contracts are cut back, however, prime contractors tend to retain more work in their own shops.)

For military-based companies, new product development is the logical alternative if acquisition is not possible. Some companies, in fact, consider it a sounder solution to the problem. One

Kinnear Rolling Doors

Basic advantages make them first choice in any era...



The door with the curtain of interlocking steel slats was *originated* by Kinnear. Its advantages are basic — as important to door efficiency as the invention of the wheel to improved land travel.

It is today's finest type of door, *made the finest of its type by Kinnear.* For example:

Opening straight upward, Kinnear Rolling Doors coil out of the way above the opening, into the compact hood mounted on the wall either inside or outside the opening (or often within the wall, where desired).

Kinnear Rolling Doors also give you full use of all space around doorways at all times. *No extra space of any kind is needed for their opening and closing action.* And *Kinnear* design makes sure the opened door always rests *above* the lintel — never steals clearance space overhead.

The rugged interlocking steel-slat curtain *(originated by Kinnear)* also gives you added protection against fire, theft, vandalism, storms, and accidental damage.

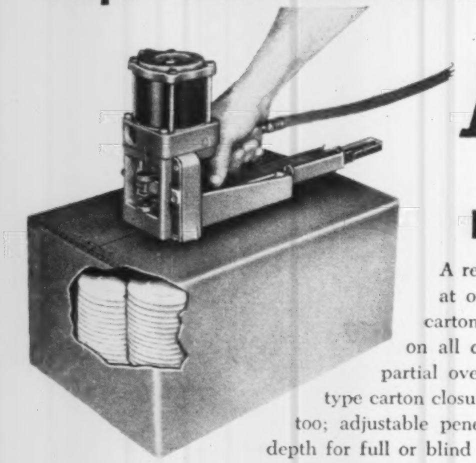
For extra resistance to weather and corrosion, Kinnear Rolling Doors are heavily galvanized, with 1.25 ounces of pure zinc per square foot of metal (ASTM standards).

Kinnear Rolling Doors are built any size, for easy installation in either old or new buildings of any construction. Manual-lift, chain, or crank operation — or motorized push-button control. Also available in non-ferrous metals. *Write for full details.*

The KINNEAR Mfg. Co.
Offices and Agents in All Principal Cities
FACTORIES:
1500-20 Fields Ave., Columbus 16, Ohio
1742 Yosemite Ave., San Francisco 24, Calif.

KINNEAR
ROLLING DOORS
Saving Ways in Doorways

Staple Filled Cartons from the Outside!



International AIR BOXER

A real lightweight champ (weighs in at only 8 lbs., 12 ozs.) . . . staples cartons after they're filled . . . takes on all comers, including center-slotted, partial overlap, full overlap, or telescope-type carton closures . . . a winner in the clinches, too; adjustable penetration control regulates staple depth for full or blind clinching.

WRITE for illustrated literature

INTERNATIONAL Gold Crown ISM STEEL STAPLES SEAL SECURELY

International Staplers

INTERNATIONAL STAPLE AND MACHINE COMPANY
Originators of Closing Staplers

800 E. HERRIN STREET • HERRIN, ILLINOIS

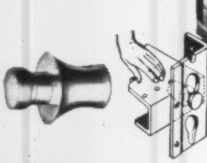
strong as a weld

EQUIPTO
Iron-Grip®
Steel Shelving
with the exclusive stud

Exclusive steel stud permits 60% faster shelf adjustment on 1½" centers without nuts, bolts or tools. The more you load the shelf the tighter it grips, yet shelf may be moved easily.

Equipto Iron-grip Shelving is immediately available from stock in all sizes, either open or closed, with or without dividers, bin fronts, drawers or label holders. See your Equipto distributor or write for complete reference manual No. 485.

Stud eliminates clips, nuts, bolts and tools
A slope in the keyhole joins with the taper on the stud to form the tightest and strongest of grips. An exclusive Equipto feature.



Equipto 660 Prairie Ave. • Aurora, Illinois

Manufacturer of World's Finest Steel Shelving - Slotted Angle - Bins - Drawer Units - Lockers - Carts - Benches.

marketing manager, Richard Kern of Miniature Precision Bearings, Inc., Keene, N.H., points out that new product development may be cheaper than acquisition in the long run, because it lays the groundwork for other new products, and some others support his view strongly. (This is a minority opinion, however, and a top official of a company whose business is new product development, Richard D. Coveny of A. D. Little, Inc., recommends acquisition as the best method of balancing.)

Frequently, the advanced technology and special manufacturing know-how of defense-based companies can be profitably applied to the civilian market. For instance, Grumman Aircraft, Hicksville, N.Y., has applied its skill in airframe construction to making aluminum boats and lighter-weight truck trailers. Grumman has been much more fortunate than other airframe manufacturers who attempted to move into civilian markets: most quickly withdrew because their production costs were too high. The most rewarding kind of new product development, of course, is that which results in a product unlike anything else on the market—provided the sales potential is really there. Manufacturers trying to invade an established market with experienced competition already on the scene may have a tough time of it.

Few ready answers

Finding a civilian market for an existing military product and vice versa is the least promising possibility, according to experienced people. Generally, military gear is "over-designed" and over-priced for the civilian market, while few commercial products, other than standard items not classed as weapons, meet military specs. Vertol Aircraft Corp. of Morton, Pa., for example, has not found any substantial civilian market for its helicopters, which are originally designed for the armed forces.

Miniature Precision Bearings is one of the fortunate few that has found civilian markets for its military-grade bearings—in portable dictating equipment and high-speed dental drills. Still, MPB was helped along in balancing by acquiring another, noncompetitive bearing company whose sales were 80 per cent civilian.

As business learns to live in a permanently defense-based economy, the "balancing" problem is likely to become an increasingly common one. And, with so many companies deciding the grass is greener in their neighbors' preserves, the increased competition generated in all markets, even with another long peacetime boom, will put management competence to a new and potent test. END

Joseph Pearson
withstands
hard
wear
resists moisture
smooth
and
snag-proof

MASONITE MAKES THE NEWS

MASONITE®
Panel Products

*Masonite Corporation—manufacturer of quality panel products

...by bringing you every one of the qualities you want in a hardboard

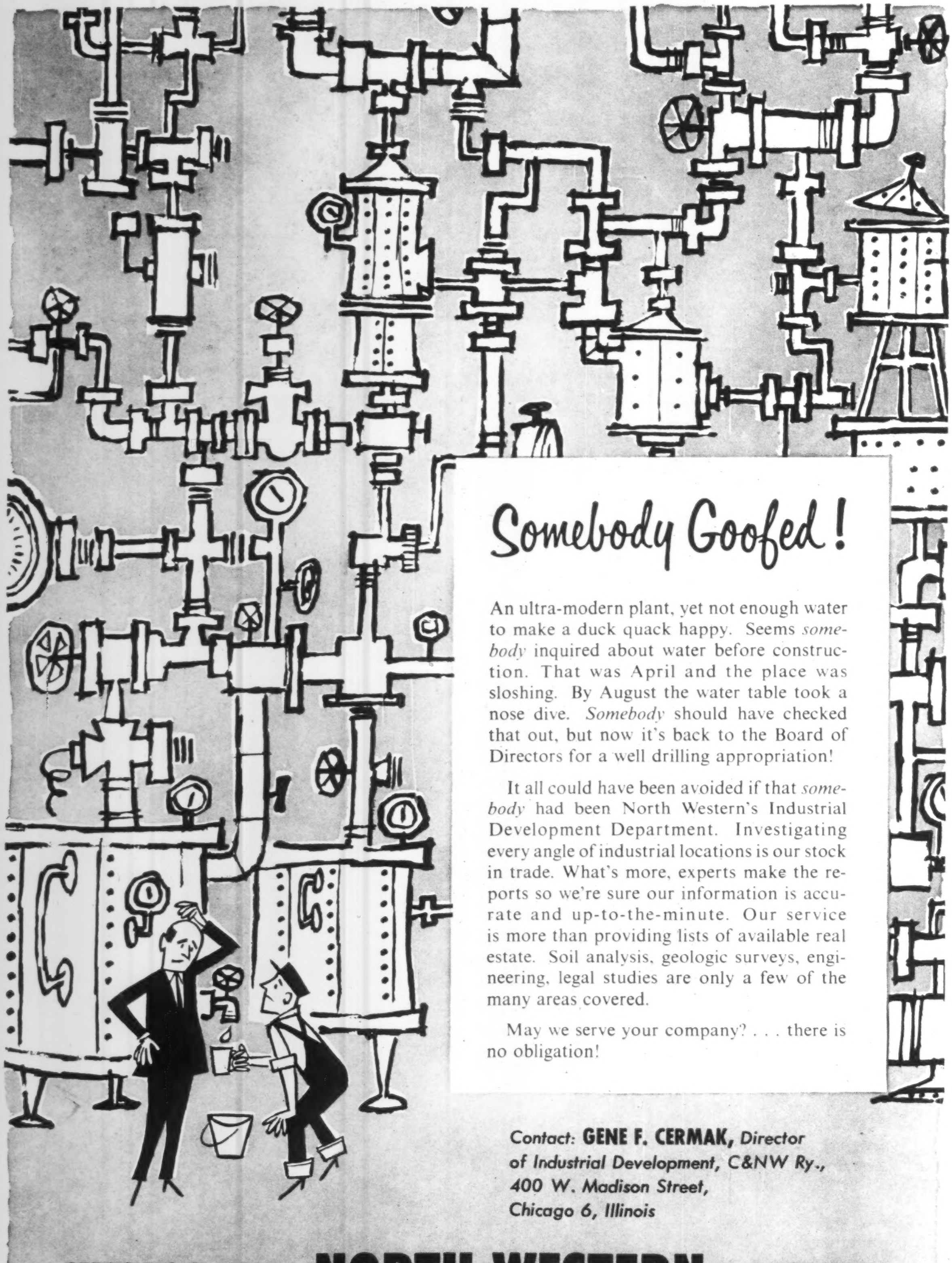
Whatever your design or production need, Masonite has the hardboard to do the job.

Masonite Corporation
Dept. 3-1
Box 777, Chicago 90, Illinois

☐ Please send latest design and production information on Masonite panel products.

☐ Please have your sales engineer call.

Name
Address
City *State*
Zone *County*



Somebody Goofed!

An ultra-modern plant, yet not enough water to make a duck quack happy. Seems *somebody* inquired about water before construction. That was April and the place was sloshing. By August the water table took a nose dive. *Somebody* should have checked that out, but now it's back to the Board of Directors for a well drilling appropriation!

It all could have been avoided if that *somebody* had been North Western's Industrial Development Department. Investigating every angle of industrial locations is our stock in trade. What's more, experts make the reports so we're sure our information is accurate and up-to-the-minute. Our service is more than providing lists of available real estate. Soil analysis, geologic surveys, engineering, legal studies are only a few of the many areas covered.

May we serve your company? . . . there is no obligation!

Contact: **GENE F. CERMAK,** *Director*
of Industrial Development, C&NW Ry.,
400 W. Madison Street,
Chicago 6, Illinois

CHICAGO AND NORTH WESTERN RAILWAY

Capital Views & Previews

What Makes a "Fair Labor Law"?

Secretary Mitchell's job: advise, administer, promote labor peace.

PAUL WOOTON, *Contributing Editor*

AS SECRETARY OF LABOR, James P. Mitchell has three related jobs. First, he is Eisenhower's adviser on labor matters. Second, he must run an Executive Department that not only administers laws but enforces some as well. Third, and most important in Mitchell's eyes, it is his job, through persuasion and influence, to maintain labor peace and promote social and economic progress in our industrial democracy.

This third aspect of Secretary Mitchell's job involves him in a wide range of fields—the development and use of manpower; abuses of power within labor unions; reciprocal trade; the division of the fruits of production; and Government's role in labor and management affairs. Persuasion aside, he believes in a policy of Government non-intervention in this latter area.

Secretary of Labor James P. Mitchell

Secretary Mitchell has sponsored a series of legislative proposals that have either directly extended or supported social benefits like Social Security and unemployment insurance.

Most recently, he has advocated a program to drive racketeers out of unions. Mitchell's original proposals, submitted to Congress by the President in January, called for a series of new laws dealing specifically with union democracy and the elimination of labor racketeers and a series of amendments to the Taft-Hartley Act. However, the Senate Labor Committee, without acting on the Administration's recommendations, produced a bill of its own that the Secretary considered inadequate, unenforceable, and unequal to the situations it set out to solve. His chief objections were to coverage (60 per cent of American small unions were exempted because of their size) and to vaguely conceived powers of enforcement which would make it hard for the Labor Department's to enforce the law. The 29 amendments that were tacked on to the bill are ample evidence of the respect in which Mr. Mitchell's judgment is held.

Ten key provisions

Mitchell envisions legislation in the labor field as a series of weapons by which "good and honest labor leaders can help themselves." He intends to work for his proposals through as many sessions of Congress as it takes. He feels they are corrective in nature, not repressive; they do not contemplate direct Government controls; they do not hinder unions in the honest conduct of their internal affairs. "They are designed," Mitchell says, "to raise the general standard of responsibility and accountability of labor-management relations without undesirable interference in union or employer affairs."

The legislation Mr. Mitchell intends to work for, "in and out of office," would:

1. Require all unions, including re-

MAKE GIVE-AWAYS PAY DIVIDENDS

YOUR MESSAGE HERE
SIGHT SAVERS

with silicone-treated
SIGHT SAVERS,
America's eyeglass cleaners.

Keep your selling message where it will be seen, with SIGHT SAVERS. 70% of your prospects and customers wear glasses. Give them these baby billboards containing over 30 tissues and you make over 30 sales impressions. Here's advertising that lasts—carries the most favorable kind of brand image. SIGHT SAVERS are different, valuable to the recipient, and economical for you. Ideal for calling cards, convention handouts. Also available in desk size Dispenser-Pak.

Write today for free samples, imprinting prices, full information. Dept. 349.

first in silicones
Dow Corning
CORPORATION
MIDLAND MICHIGAN

Sweeps Cleaner, Faster, Better...
Outlasts Ordinary Brushes 3 to 1

Speed Sweep
The brush with the steel back

Over half the nation's top-rated firms have proved there's a Speed Sweep for every job.
Write for complete brochure and prices.

MILWAUKEE DUSTLESS BRUSH CO.
530 N. 22nd STREET, MILWAUKEE 3, WIS.
Send complete facts on Speed Sweep:
NAME __________
ADDRESS __________
CITY __________ STATE __________

Why MICROHONING AT EVINRUDE

trims costs . . . booms productivity . . . eliminates operations...improves quality

Evinrude Motors, Division of Outboard Marine Corporation, has replaced with Microhoning their former method of processing conn bores. Here's why:

MICROHONING INCREASES PRODUCTIVE CAPACITY 23 TIMES

Before Microhoning equipment was installed, Evinrude used diamond boring on wristpin and crankpin bores. Now! A per-man productivity comparison of the two processes shows: diamond boring, 300 rods in 40 hours; *Microhoning, 7,000 rods in 40 hours.*

Shown to the left is one of two lines of Microhoners. Each machine has: Microdial automatic stone-feed and stone-wear compensation; automatic stone-wear indicator; and Microsize Gage Ring automatic sizing control.

REDUCES OPERATIONS

Greatest cost-cutting contribution made by Microhoning is *elimination of three former operations:*

1. Re-milling locating faces of wristpin bores.
2. Straightening of rods after boring.
3. Milling oil hole grooves in wristpin bores.

ELIMINATES BRONZE INSERTS

The functional surface characteristics of Microhoned rod bores preclude the need for bronze bushings or shoes. Based on current production schedules, *the cost of millions of bronze inserts will be saved this year.*

ASSURES FEWER REJECTS

From a Microhoning run of 62,000, receiving 100% inspection on an air gage, only 200 rods required reprocessing. *This is a rejection rate of only 3/10 of 1%.*

IMPROVES PRODUCT QUALITY

Microhoning is a low-velocity abrading process that leaves bore surfaces free of torn, smeared or burned metal. Benefit: *Rods that have precise, longer wearing bores.*

PRECISION PRODUCTION THROUGH MICROHONING
MICROMATIC

To learn more of why Microhoning provides efficient stock removal, closer tolerances and functional surfaces, write to:

MICROMATIC HONE CORP.
8100 SCHOOLCRAFT AVENUE · DETROIT 38, MICHIGAN

gional and state conferences, and, where appropriate, employers to file full and detailed reports with the Commissioner of Labor Reports (a new office that would be created in the Labor Department).

2. Require the Commissioner of Labor Reports to make available to the public full and detailed reports covering the operations of all health, welfare, and pension funds, the handling of all union funds and funds of affiliated organizations, the handling of all funds exchanged between employers and union officers (to reveal conflict of interest dealings), and details of union organization, including the union's financial structure.

3. Authorize the Secretary to investigate the truth or accuracy of these reports, with the necessary enforcement powers to make the program workable.

4. Permit the Secretary, in accordance with the requirements of the Administration Procedures Act, to impose sanctions on any union which failed to file the reports required of it or filed false reports.

5. Permit union members to sue dishonest labor officials as fiduciaries in Federal or state courts.

6. Tighten the secondary boycott provisions of the Taft-Hartley Act to protect all employers and individual employees from unfair coercion, and also to deal with the problem of "hot cargo" clauses.

7. Forbid blackmail picketing designed to force workers to join or employers to accept a union which the workers unquestionably did not want.

8. Make it a felony under Federal law for union officers or employers to make or receive payments to influence one another's actions.

9. Make embezzlement of general union funds, as well as health, welfare, and pension funds, a Federal crime.

10. Eliminate a "no-man's land" by authorizing the states to act where the NLRB declines jurisdiction.

More curbs on unions?

While President Eisenhower and Secretary Mitchell feel that the steps they have recommended are about as far as legislation should go in the immediate future, there are those who think otherwise. Many Washington labor specialists on the management side feel that legislation should also include: heavier penalties for violence on picket lines; more protection for innocent third parties; drastic limitations on powers vested in union leaders; curbs on any union able to paralyze business generally (such as the Teamsters); limitations on the right to strike in time of national emergency; and, of course, a "right-to-work" provision doing away with compulsory union membership. END

EXECUTIVE PAY

continued from page 39

poor earnings. In some cases there is evidence that other considerations were involved. For example, certain companies found that the practice of recruiting executive talent outside had lifted all salaries to unrealistic levels. Others appear to have taken advantage of what they considered a unique opportunity to "save overhead." Undoubtedly, too, many of these salary cuts were based more on caprice than on a careful appraisal of the facts.

It is worth noting that a sizable proportion of the companies that have reduced salaries have executive bonus plans. Since sharply lower profits—which occasioned the salary cuts in the first place—can be expected to slash bonus payments rather substantially, executives in such companies are penalized twice. Such a double cut, unless absolutely necessary, can do real damage to a compensation program.

Probably the most serious problem, however, lies in the effect on compensation spreads between various levels of responsibility. Hourly wages are undoubtedly going up again this year, which means that to maintain a reasonable differential the compensation of the first level of supervision should also rise. But if the compensation of the first level of supervision is going up, and the compensation of the executive group is coming down, the spread between levels necessarily narrows. A series of studies by McKinsey & Company has shown that spreads between hourly employees, the first level of supervision, middle management, and policy-level executives have remained remarkably constant in the past ten years. However, these spreads are substantially narrower than they were prior to the war. Many knowledgeable executives believe that any further narrowing of the spreads between responsibility levels will seriously weaken executive incentive, which has already been sapped by the effect of income taxes.

This suggests that when it becomes necessary to reduce executive compensation, top management would do well to take a planned approach and carefully assess the risk involved.

Bonus headaches

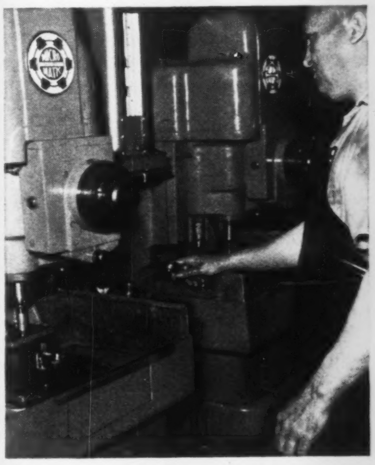
Predicting that his company's bonus fund for 1958 would be 50 per cent below what it had been in 1957, the chief executive of a big manufacturing company remarked, "Frankly, I'd rather we had no bonus fund at all than be faced with the necessity of distributing only half of last year's fund."

This is the problem haunting many company presidents in 1958. The recession hit most industries late enough last

How MICROHONING AT EVINRUDE

trims costs . . . booms productivity . . . eliminates operations...improves quality

By installing Microhoning equipment to process wristpin and crankpin bores in conn rods, Evinrude Motors, Division of Outboard Marine Corporation, realized considerable savings. The following comparison with previously used diamond boring shows how Microhoning cut time, materials and costs:



Close-up of double unit Microhoner shows operator checking a wristpin bore on air gage. Microdial, which automatically compensates for abrasive wear, is shown in center of photo.

MICROHONING BOOSTS PRODUCTIVE CAPACITY 23 TIMES

Diamond Boring Production Per Man: 300 rods in 40 hours.

Microhoning Production Per Man: 7,000 rods in 40 hours.

Several rod sizes are Microhoned on the same equipment — bore diameters range from .874″ to 1.500″, bore lengths from .815″ to 1.011″. Microhoning removes .005″ stock from wristpin bores in about 24 seconds (floor-to-floor) and generates a controlled finish of 25 to 30 microinches as specified. On crankpin bores, Microhoning removes .0005″ stock to generate specified finish of 3-5 microinches in 17 seconds (F-T-F). Tolerances on both bores are held to .0001″ for roundness and straightness, and .0004″ on diameter.

ELIMINATES THREE OPERATIONS

1. Former re-milling of locating face on wristpin bore is eliminated — *Microhoning's float principle maintains original bore location.*

2. Straightening after rough boring is no longer required — *Microhoning tool follows neutral axis of bore.*

3. Milling oil hole grooves in wristpin bores is eliminated — *Microhoning generates a cross-hatch pattern that provides built-in oil reservoirs.*

SAVES COST OF MILLIONS OF BRONZE INSERTS PER YEAR

Microhoning's low-velocity abrading, with efficient cutting over a wide area, produces surfaces free of torn, smeared or burned metal.

Result: Precise bores having surfaces that resist galling and flaking.

Benefit: User obtains longer wearing rod bores and a functional supplanting of bronze inserts.

PRECISION PRODUCTION THROUGH MICROHONING
MICRO MATIC

For further information on Microhoning process or to receive movie "Progress in Precision", write to:

MICROMATIC HONE CORP.
8100 SCHOOLCRAFT AVENUE · DETROIT 38, MICHIGAN

year so that profits for the full year held up. Hence, bonus distribution posed few problems. A recent McKinsey survey covering 642 companies shows that while profits declined by 3.2 per cent in 1957, the compensation of top-level executives increased by 1 per cent.

Many companies started their bonus plans during the past decade, when boom piled on boom and profits increased year after year with monotonous regularity. During recent years, even long-established plans were administered in a persistently relaxed environment, and management tended to lose sight of the penalty element necessary to an effective incentive plan. And relatively few top managements have had much experience in bonus disbursements when the fund is 50 per cent or 75 per cent below the previous year.

One chink in the bonus administration armor that is showing up this year is a widespread weakness in appraising the relative performance of individual executives. In boom years, everyone apparently does reasonably well. But when the going gets rough, and salaries and bonuses must be cut, management must be able to weigh correctly the relative contributions of its executives.

To do this, it needs a highly developed planning and control organization that makes skillful use of market and economic research tools, as well as of accounting, to set up targets that provide the basis for determining performance. Some companies have taken steps in this direction, but much remains to be done before performance appraisal matures as a management tool.

No tested solutions

The unhappy chief executive whose bonus fund is down by 50 per cent has no recession-tested guidelines to insure that his bonus decisions in 1958 won't plague him in future years. Should a sharply reduced fund be spread more thinly over the same number of people as last year—at the risk of providing inadequate rewards for the outstanding performers? Or should the number receiving bonuses be cut, with consequent morale problems among those passed over? He has no basis for judging. Nor can he be sure whether he should disproportionately reduce payments to top-level executives so that lower-level eligibles can be treated better, or vice versa.

Many companies greatly broadened eligibility in their bonus plans during the war and postwar years. Employees were hard to get and keep during this period, and any stratagem that kept them was worth trying. The argument that bringing people into the bonus plan as the way to get "teamwork" and make them feel they were part of "management" often fell persuasively on top management's ears.

The difficulties of administering such a broadly based bonus plan are legion. But in a poor profit year like 1958, dividing the bonus fund between the executives at the top and the lower supervisory levels becomes a nightmare. The importance of this decision can be judged by the fact that one large company paid two-thirds of its total bonus fund last year to eligibles earning less than $15,000 in salary.

In such cases the chief executive has *only* hard choices. In the case mentioned, the bonus paid to those earning less than $15,000 has averaged between 7 per cent and 11 per cent over the past four years, and is almost certainly regarded by the recipients as part of salary. However, if the bonus fund forecast for this year is to provide 5 per cent of salary for this group, nothing will be left for the over-$15,000 group who really run the company.

THE AUTHOR • Long recognized as one of the top authorities in the executive compensation field, Arch Patton is a Principal in the Chicago office of McKinsey & Company. He came to McKinsey in 1942 from the Wilbur-Suchard Chocolate Company, where he had been vice president for marketing. Mr. Patton directed the first organized effort to measure the relative compensation of executives in different industries, and his studies of compensation have taken him into the area of corporate organization as well. A frequent contributor to business and professional magazines, he is the author of "What Makes Executives Run," which appeared in the September 1957 issue of DR&MI.

Without guidelines in past experience and a basic philosophy of salary-bonus relationships, it is small wonder that poor decisions—or, rather, decisions that hindsight labels poor—are frequently made in difficult years.

What price stock?

For some months the sharp drop in stock values that accompanied the recession caused considerable anguish among holders of stock options that were then priced well above the market. This problem, however, was far more acute in some situations than in others, and its causes generally stemmed back to the original set-up of the option plan. As a rule, in companies that suffer from the most acute morale problems—"discounts" from option price being equal—one or more of the following conditions is usually found:

1. The industry is one in which cyclical swings have far greater impact on profits than the action of the executive group. Railroads are a classic example.
2. Many option holders have little to do with company profitability and feel little or no responsibility for a slump.
3. Many option holders are in relatively low income brackets, and see little profit potential in a 25 per cent capital gain opportunity such as the option provides.

In industries where profits depend heavily on executive skill, on the other hand, companies whose option holders are in high tax brackets and are largely responsible for company profits generally continue to recognize their option plan as an effective incentive.

Apparently, few publicly owned companies have taken advantage of the provision in the tax law permitting redistribution of options at a lower price. Reluctance to make such a change is strongly rooted in the desire among company directors to keep executives on the same footing as stockholders.

Special situations, naturally, demand special action. More than one executive, recruited by a company at the peak of the market to do a specific job, has asked for—and received—a "new deal" that took into account realities of the situation over which he had no control.

Fringes will flourish

The recession had little effect on the heavy commitments already made in pension, medical, hospitalization, group insurance, and other such plans. There is some evidence, however, that management is becoming increasingly aware of the huge—and inflexible—costs of these fringe benefits.

Will the growing recognition of the substantial fixed overhead involved in fringes dampen industry's ardor for such plans? As yet, it is impossible to say. However, there is increasing awareness of the fact that as fringe costs rise from 10 per cent to 15 or 20 per cent of salary expense, just that much less is available for the direct motivation of executives. Fringes have little *current* incentive value. This must come from other sources: salary, bonus, stock options, and the like.

One effect of the recession has been to focus attention on the realities of executive compensation administration more strongly than at any time in the past few years. It has exposed opportunism and plagued the poor administrators with king-size headaches.

But in some ways the recent slump was a genuine help in industry. It provided a tangible yardstick of effectiveness in an area long obscured by the booming economy. It has enabled management to test its philosophy and practices in an environment that demands outstanding performance from every executive, and in which mistakes stand out with merciless clarity. END

KEEPING YOUR WORKFORCE

continued from page 46

small company can do through an integrated effort to expand rather than contract in slack times. Despite a falling paper market—the majority of the industry is operating at 10-15 per cent below capacity—Hudson is maintaining full employment and increasing sales and profits.

According to officials of the company, the past year has given them a needed breathing speil in which to streamline operations. The result: a program called "Operation Capacity," which, like many successful business programs, is based on a simple idea, painstakingly worked out, solidly supported by management, and attractively packaged.

Management in this case has set itself ten goals: (1) strengthening the organization structure, (2) expanding the sales force, (3) improving sales service, (4) improving management-labor communications, (5) stepping up supervisory training, (6) expanding sales aid programs for distributors, (7) improving suggestion systems, (8) reducing inventories, (9) setting better standards of performance, and (10) encouraging employee support.

Talking to employees

To get everyone into the act, a slide-film talk has been prepared for presentation to supervisors who, in turn, present it to their departments. The talk describes Hudson's competitive position in the industry and the measures the company must take to maintain and improve that position. Specifically, each employee is to try to save the company 3.5 cents on every sales dollar. This money will be used to add 50 salesmen, increase advertising, and send merchandise an additional 200 miles.

Supervisors keep score cards, checking off each employee's record (in attendance, punctuality, production, safety, machine downtime cost, and quality). The best department gets a prize, and the best employee qualifies for an employee-of-the-month or an employee-of-the-year award.

Even families are drawn in. The company has sent letters home to explain the purpose of the drive and enlist the "family-behind-the-man" in this effort to maintain full employment. The family that, in some measurable fashion, has given the best support to the man at the machine will receive a company award.

Nor is the community neglected. Besides getting information to school and civic groups, Hudson works with local merchants to run "Operation Capacity" days.

Total effect: plant-wide, community-wide cooperation. And, for a cost of ap-

THESE
AMERICANS
AND
800,000
OTHERS
ARE
CURED
OF
CANCER

Alive today . . . because they went to their doctors *in time!* Every year more and more Americans are being cured of cancer. But the tragic fact, our doctors tell us, is that every sixth cancer death is a *needless* death. So many people just don't consult their doctors when the disease is in its early . . . and therefore more curable . . . stage.

Let's give our doctors a chance to head off cancer in time! Form the life-saving habit of a head-to-toe health checkup once a year. For men, this should include a chest x-ray; for women, a pelvic examination.

Make it a habit . . . for *life.*

AMERICAN CANCER SOCIETY

proximately $10,000, Hudson's sales are up, its business thriving.

Projects of this nature in the Very Big League are often decentralized, like General Electric's "Operation Upturn." The expressed purpose of this program is to "work and sell our way out of a recession" by building sales and jobs through better production and increased product values.

GE set up a ten-point over-all goal: (1) careful planning at each level to minimize unemployment and keep production as steady as possible, (2) adjustment of inventories, (3) elimination of waste, (4) continuance of research and development, (5) continuance of recruitment, development, and training of key personnel, (6) continuance of capital investment, (7) keeping prices competitive, (8) improvement of credit terms, (9) giving extra values, and (10) supplying plenty of information to the public.

Although the methods of meeting these goals are left to the divisions, the entire company, from the president down, is backing the program. Material and help are readily available to division managers.

To instill what G-E President Ralph Cordiner calls a "sense of mission" in each employee, a steady barrage of information and slogans has been released in the plants. Through house organs, letters home, public address systems, meetings, and advertisements in the local press, workers are constantly impressed with the fact that they can contribute to the upturn in business. "Operation Upturn" buttons are distributed, and an "Operation Upturn" song has been written and widely promoted.

Hitting a single target

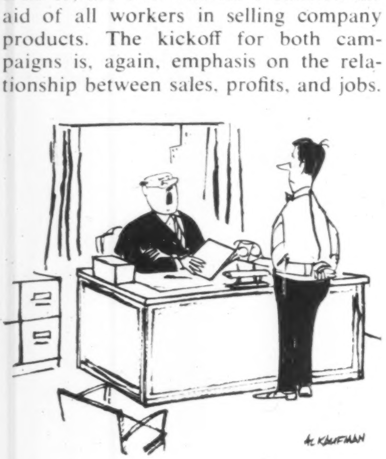
Another way industry drives to cut costs and, at the same time, hold on to workers, is to tackle a single aspect of the cost or sales picture and give it the works.

Waste, for example, is the big target at the Bridgeport Brass Company, Bridgeport, Conn. Here, the relation between jobs and costs is hammered home with crash force. Posters remind employees that if they can each cut costs by $1 a day, they will save the company $360,000 a year. Taking good care of expensive equipment is one way to do it—so price tags and value cards blossom on office equipment, machines, and tools. A week's free lunches at the company cafeteria go to anyone who can guess the value of the contents of a jar full of parts that could be mistaken for scrap. Slogans are printed on time cards so that workers begin and end the day with cost-consciousness. The importance of a full day's work for a full day's pay is dramatized by showing that if 6,000 workers, each earning $2 an hour, waste 30 minutes a day, it costs the company $1.5 million a year. Everyone is also urged to cut down on electricity, telephones, gas, and water in the plant.

The 60-minute hour

Thompson Products Company, Cleveland, is concentrating on getting its money's worth out of each labor dollar it spends. A "60-Minute Man" program aims to sell job-conscious employees on the urgency of giving a full day's work for a full day's pay. Management estimates that there are at least 60 minutes during the day when the company has "conspicuous" losses—the 30 minutes after the shift begins and the 30 minutes before it ends. Workers are told they can help maintain the company's competitive position by eliminating all such unnecessary losses. Employees who may not have responded in periods when jobs were easier to get are now genuinely receptive to concrete suggestions that point any way to increased security, and the Thompson program is going over big. Supervisors report that people are working harder and returning promptly from coffee breaks, rest periods, and lunch. Downtime on machines has been considerably reduced. As one industrial relations director who replied to DR&MI's questionnaire commented, "In itself, the shortage of jobs in this area has a way of increasing efficiency."

Most companies said that it pays to give employees regular reports on company sales and profits during this recession period. Few, however, think any considerable gain is to be made from asking line workers' help with sales. But in the all-out battle for the competitive dollar some firms will leave no stratagems untried. B. F. Goodrich Company, Akron, and Gates Rubber Company, Denver, are two who have enlisted the aid of all workers in selling company products. The kickoff for both campaigns is, again, emphasis on the relationship between sales, profits, and jobs.



"Son, I'm taking you out of the shipping department and making you a vice president—where you can do no harm."

And reports are that workers respond well to this kind of SOS.

At Gates, an integrated six-point program called "Help-your-Sell-f" aims to stimulate sales at the factory store in the area. Workers get trading stamps, redeemable for merchandise, for each friend who buys at the store. The store also offers prizes to the best salesman from the ranks of the plant's workers. To encourage workers to participate in this program, the company sends a kit to each employee. It contains a stamp book, with ten stamps already pasted in as a starter, and a batch of 3-by-5 "get acquainted" cards to be signed by the worker and given to friends to use when they buy at the store. The buyer, in turn, gets trading stamps, merchandise guarantees, and certain reductions.

In addition, Gates wants its workers to be well-informed about the products the company makes. For this purpose, special exhibits are featured in the plant, and certain days are set aside for tours by workers' families. Suggestion and safety programs have been geared to the sales angle, and each department's work is related to sales, dividends, and jobs. To top it all off, twelve to fifteen outstanding employees, chosen from the entire plant, are invited to participate in a brainstorming session devoted, of course, to sales and jobs.

Hitting the merchant

At Goodrich, the effort is simpler, but reportedly effective. The company printed "Reminder" and "Thank You" slips for employees to enclose with their checks when they pay bills. Both slips list Goodrich products on one side; on the other, they express the worker's interest in his company's business. One slip says the employee hopes that his dealer will use the Goodrich products; the other thanks the dealer for his service and points out that the dealer himself will get good service from Goodrich products. The company says that the milk man, the butcher, and the baker all need one or many of the products that Goodrich makes, and a personal pitch from one of his customers may spur business.

Employees who either buy or sell more than $100 worth of merchandise are rewarded primarily by a knowledge that they have made a concrete contribution to their company's economic health—and their own jobs—and, second, by company recognition in the form of a prestige award.

All in all, indications are that U.S. industry hasn't taken this year's slump lying down. There's no shortage of optimism or ingenuity in the effort to move ahead, and most companies seem to be taking a long-term view of the importance of their employees in the success of that effort. END

Advertising Index

—A—

Acco Products, Division of Natser Corporation.....112
La Porte & Austin, Inc.
Acme Visible Records, Inc.....113
E. H. Brown Advertising Agency
All-Steel Equipment Inc..... 78
E. R. Hollingsworth & Associates
American Automatic Typewriter Company.....101
Frank C. Nahser, Inc.
American Credit Indemnity Company..... 6
VanSant, Dugdale & Co., Inc.
American Lithfold Corporation.....106
Burlingame-Grossman Advertising
American Photocopy Equipment Co. 66A-66B, 86A-86B
Irving J. Rosenbloom & Associates, Inc.
American Telephone & Telegraph Co.....Cover III
N. W. Ayer & Son, Inc.
American Thermoplastic Company.....110
Gibbons Advertising Agency
Armco Drainage & Metal Products..... 12
N. W. Ayer & Son, Inc.
Art Metal Construction Company..... 75
Comstock & Company

—B—

Bankers Box Company.....88, 92
Frank C. Jacobi, Inc.
Big Joe Manufacturing Company..... 5
E. H. Brown Advertising Agency
Borroughs Manufacturing Company, Subsidiary American Metal Products Company. 84
Roland G. Spedden Advertising Agency
Bruning, Charles, Company, Inc..... 82
H. W. Kastor & Sons Advertising Co.
Bunn, B. H., Co..... 86
Robertson, Buckley & Gotsch Inc.
Burns, William J., International Detective Agency, Inc., The..... 31
Fletcher D. Richards, Inc.
Burroughs Corporation.....76–77
Campbell-Ewald Company
Butler Manufacturing Company..... 28
Aubrey, Finlay, Marley & Hodgson, Inc.

—C—

Carcross Company..... 99
George T. Metcalf Co.
Chase Manhattan Bank, The..... 19
Albert Frank-Guenther Law, Inc.
Chicago and North Western Railway.....144B
The Caples Company
Columbia Ribbon & Carbon Manufacturing Co., Inc.....58, 90
E. M. Freystadt Associates, Inc.
Commercial Credit Corporation..... 20
VanSant, Dugdale & Co., Inc
Cooke, J. Leo, Warehouse Corp.....129
DuFine & Company, Inc.
Copease Corporation.....102
Anderson & Cairns, Inc.
Cushman & Denison Mfg. Co.....106
Knox, Kornfeld & Smith, Inc.
Cutler-Hammer, Inc.....26–27
Kirkgasser-Drew

—D—

DeJUR-Amsco Corporation.....107
Friend-Reiss, Inc.
Dickey & Sheffield.....141
Dictaphone Corporation..... 62
Young & Rubicam
Dow Corning Corporation.....145
Church and Guisewite Advertising, Inc.
Downington Iron Works, Inc..... 24
The Buchen Company
Dwyer Products Corporation..... 97
Juhl Advertising Agency

—E—

Eagle Picher Company, The..... 9
The Ralph H. Jones Company
Eastern Express, Inc..... 8
Kuttner & Kuttner, Inc.
Ebasco Services Incorporated..... 85
Albert Frank-Guenther Law, Inc.
EBCO Manufacturing Company, The.....109
Geyer Advertising, Inc.
Equipto.....144
Arthur R. Mogge, Inc.
Executone, Inc..... 79
The Joseph Katz Company

—F—

Farquhar, A. B., Division, The Oliver Corporation..127
Foltz-Wessinger, Inc.
Fluor Corporation, Ltd., The.....103
Hixson & Jorgensen, Inc.
Friden, Inc.....117
J. Walter Thompson Company

—G—

General Public Utilities Corporation..... 15
Goold and Tierney, Inc.
Globe Hoist Company.....140
The Eldridge Company
Globe-Wernicke Co., The..... 95
Strauchen & McKim
Graphic Systems..... 92
Diener & Dorskind, Inc.
Gray Manufacturing Co..... 65
Lewin, Williams & Saylor, Inc.

—H—

Heller, Walter E., & Co..... 14
Gourfain-Loeff, Inc.
Hill, R. O. H., Inc..... 91
The Buckley Organization
Hy-Test Safety Shoes, Division of International Shoe Company.....133
Jos. E. Schmitt, Inc.

—I—

Industrial Marking Equipment Company, Inc., The.133
The Wesley Associates, Inc.
Ingersoll Kalamazoo Division, Borg-Warner Corporation.....135
Paxson Advertising, Inc.
International Nickel Company, Inc., The.....130
• Marschalk and Pratt, Division of McCann-Erickson, Inc.
International Staple & Machine Co.....144
Batz-Hodgson-Neuwoehner Advertising
International Steel Company, Lindsay Structure Division.....137
Keller-Crescent Co.

—K—

Kennedy Car Liner & Bag Co., Inc.....126
Poorman, Butler & Associates, Inc.
Kinnear Mfg. Co., The.....143
Wheeler, Kight & Gainey, Inc.

—M—

Magline, Inc.....136
Rossi and Company
Magnesium Company of America..... 18
Marsteller, Rickard, Gebhardt and Reed, Inc.
Manifold Supplies Company.....115
Williams Advertising Agency, Inc.
Masonite Corporation.....144A
The Buchen Company
Metalab Equipment Co..... 30
H. J. Gold Co.
Micromatic Hone Corporation.....146–147
Gray & Kilgore, Inc.
Midwest Freight Traffic Service Bureau, Inc.....124
J. H. Fisher Associates
Milwaukee Dustless Brush Company.....145
Al Herr Advertising Agency, Inc.
Minnesota Mining & Manufacturing Company.Cover II
Erwin Wasey, Ruthrauff & Ryan, Inc.
Monroe Calculating Machine Company, Inc.....105
L. H. Hartman Co., Inc.
Moore Business Forms, Inc..... 98
N. W. Ayer & Son, Inc.
Morris, Bert M., Co..... 94
Edward S. Kellogg Company
Mueller Brass Co..... 23
Price, Tanner & Willox, Inc.
Multiplex Display Fixture Company..... 88
Arthur R. Mogge, Inc.
Murray, D. J., Manufacturing Co.....134
R. C. Breth, Inc.
Muzak Corporation..... 7
Schwab and Beatty, Inc.

—N—

National Business Show.....112
Carpenter-Proctor, Inc.
National State Bank of Newark, The.....137
Williams and London Advertising
National Truck Leasing System.....136
W. S. Kirkland
National Vulcanized Fibre Company..... 13
Harris D. McKinney, Inc.
New York Central System..... 4
J. Walter Thompson Company
North American Van Lines, Inc.....118–119
Applegate Advertising Agency, Inc.

—O—

Olympia Typewriters..... 83
Mann-Ellis, Inc.
Olympic Luggage Corp.....112
Sykes Advertising Inc.
Oxford Filing Supply Co., Inc..... 93
Kelly, Nason, Inc.

—P—

Peerless Photo Products, Inc..... 89
John Mather Lupton Company, Inc.
Philco Corporation, Government and Industrial Division..... 96
Maxwell Associates, Inc.
Pitney-Bowes, Inc.....69, 87
L. E. McGivena & Co., Inc.
Pressed Steel Tank Company..... 24
The Buchen Company

—R—

Raymond Corporation, The.....125
Taylor M. Ward, Inc.
Recorday Company.....115
Record Controls, Inc.....106
Campbell-Sanford Advertising Co.
Remington Rand Division, Sperry Rand Corporation.....102, 104, 106, 108, 110, 113
Paris & Peart, Inc.
Revo-File Division, The Mosler Safe Company..... 81
Cunningham & Walsh, Inc.
Revolvator Company.....138
Fredricks & Company
Reznor Manufacturing Company.....136
Kight Advertising, Inc.
Rock Island Lines..... 10
Aubrey, Finlay, Marley & Hodgson, Inc.
Roura Iron Works, Inc.....141
Marsteller, Rickard, Gebhardt and Reed, Inc.
Royal-McBee Corporation..... 48
C. J. LaRoche and Company, Inc.
Ryder System, Inc.....128
Grant Advertising, Inc.
Ryerson, Joseph T., & Son Inc..... 16
The Buchen Company

—S—

Shaw-Walker Company, The..... 70
J. Walter Thompson Company
Snell, Foster D., Inc.....132
St. Georges & Keyes, Inc.
Steelcase, Inc..... 57
Wesley Aves & Associates, Inc.
Sten-C-Labl, Inc.....100
Gibson-Erlander, Inc.

—T—

Tel-A-Story, Inc.....110
Warren & Litzenberger
Teletype Corporation.....72–73
Marsteller, Rickard, Gebhardt and Reed, Inc.
Texas Company, The.....Cover IV
G. M. Basford Company
Texas Power and Light Company.....121
Don L. Baxter, Inc.
Textile Banking Company.....152
L. E. McGivena & Co., Inc.
Thomas Collators, Inc..... 80
Carpenter-Proctor, Inc.
Times Facsimile Corporation, Stenafax Division....108
Thomas & Douglas, Inc.
Toronto-Dominion Bank, The.....142
Albert Frank-Guenther Law, Inc.

—U—

Underwood Corp.....60–61
William Esty Company, Inc.
Unites States Steel Corporation.....2, 32
Batten, Barton, Durstine & Osborn, Inc.

—V—

Victor Adding Machine Co..... 68
John W. Shaw Advertising, Inc.
Visi-Shelf File, Inc..... 91
Ritter, Sanford & Price, Inc.
Vu-Ad Company, Division of Scripto, Inc.....120
Al Paul Lefton Company, Inc.

—W—

Wagner Electric Corporation..... 30
Arthur R. Mogge, Inc.
Wassell Organization.....104, 110
James R. Flanagan Advertising Agency
Watson Manufacturing Co., Inc.....116
Griffith & Rowland
West Chemical Products, Inc..... 21
G. M. Basford Company
Wonder Building Corp. of America..... 22
Franklin Advertising, Inc.

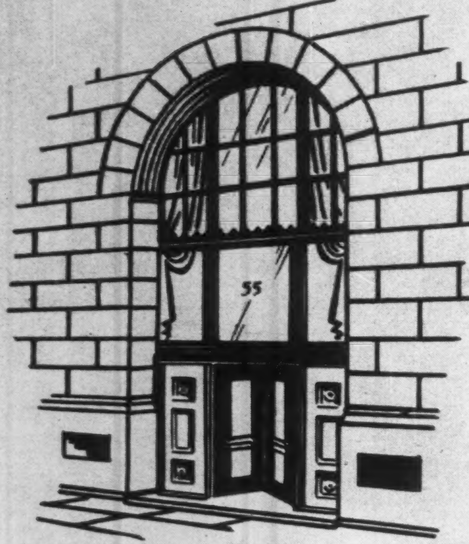
—Y—

Yoder Company, The.....139
G. M. Basford Company

ADVERTISING SALES STAFF: Alex J. Dughi, Advertising Manager
New York 8. 99 Church St., DIgby 9-3300.....George Maturniak, Jack Phillips, Bert Berne
Philadelphia 2. 3 Penn Center Plaza, LOcust 8-3500.....Alvah B. Wheeler
Chicago 6. 300 W. Adams St., RAndolph 6-8340.....John Krom, Ralph O. McGraw
Cleveland 13. 629 Terminal Tower, TOwer 1-3520.....Lowell Negley, Jr.
Detroit 26. 1100 Cadillac Tower, WOodward 1-3764.....Carl Neppach, Jr.
Pittsburgh 32. 5215 Centre Ave., MU 3-1800.....Vince Winterhalter
Los Angeles 14. 610 S. Main St., MAdison 2-2141.....Walter Huckins
Atlanta 8. 1722 Rhodes-Haverty Bldg., JAckson 2-8113.....H. F. Cogill, Morgan Pirnie

Our service is tailored to provide all the working capital any qualified client needs, without increased borrowing, diluting profits or interfering with management.

Information available for any manufacturer or distributor with $500,000 or more annual sales.



Textile Banking Company

55 Madison Avenue, New York 10, N.Y.

Providing operational financing for the apparel, electronics, furniture, leather, plastics and textile industries.

Subsidiaries:

T. B. C. Associates, Inc., New York **Southwest Texbanc, Inc., St. Louis**

SUBSCRIPTION ORDER FORM

DUN'S REVIEW and Modern Industry
99 Church Street
New York 8, N.Y.

Enter my subscription for one year. I will pay $5 when billed (USA, Possessions, and Canada; elsewhere $10). Send to -

Name ____________________

Title ____________________

Company ____________________

Street Address ____________________

City ________ Zone ________ State ________ 9-58

The Reviewing Stand

- Buyers on the lookout for new businesses have their eye on "management fatigue." Even in a company with fair earnings and good prospects, the wear and tear of competition may bring on a weariness that makes retirement or change of scenery inviting to an owner-manager. Hence many family-held companies that are in no danger of liquidation go up for sale. This is one of the aspects of the present merger situation discussed by John C. J. Wirth and Thomas J. Carley in the October DR&MI. Their article examines the present opportunities for growth through "diversification," whether new markets are cultivated by pioneer effort or acquired through purchase. Nowadays, it appears, there's less "showmanship" and perhaps more "knowmanship" motivating the companies which seek a broader sales and operating base for future expansion.

- That the man who sells it earns more than the man who makes it is an old truism which illustrates the relative volatility of sales costs compared to production costs. Everything succeeds or fails at the point of sale, and that is why the role of the salesman is critical to the profitable movement of goods. In a coming issue Aaron Sternfield reports on a recent DR&MI survey of new trends in salesmen's compensation. Are you paying salesmen too much or too little in relation to their responsibility for moving your merchandise or selling your service? Here is an appraisal of the current sales situation that will be helpful as a basis of comparison, a discussion that covers methods of compensation, incentives, and guides to measurement of territorial effectiveness.

- Lack of capital for expansion may be a prominent obstacle to any company's growth program, whether short term or long term. The question of where to get the money sometimes dims the enthusiasm of management for a worthy project. But there is occasionally a bypass to the roadblock, given the imagination to conjure up the remedy and the ingenuity to put it into effect. In a forthcoming article, Faye Henle tells us how to get "the other fellow" to help finance the next step through mutual interest in future profits. The answer may be equipment leasing, and Miss Henle offers plenty of convincing evidence, in the form of an array of case histories, of its value in some situations. —A.M.S.

Those Two Important Words on Your Telephone

Western Electric
G-3

WESTERN ELECTRIC means efficiency, quality and long life in telephone equipment. All are reflected in the speed, clarity and dependability of your telephone service.

Western Electric is the manufacturing and supply unit of the Bell System. Its specialized abilities in these fields and the efficiencies and economies of centralized operation have proved of great value over many years.

There's a distinct advantage for telephone users in the fact that Western Electric works for the most part only for the Bell System, and for the U. S. Government when called upon.

Because defense and telephone service are so vital, Western Electric must manufacture for the utmost in dependability and long life without compromise anywhere along the line.

The repeater units in the new underseas cables are one example of how Western Electric must build for long, trouble-free service.

A further advantage is the way research and manufacturing are tied together. Being a part of the Bell System, Western Electric can work closely with the Bell Telephone Laboratories and the local telephone companies.

Western Electric must be ready at all times to produce 200,000 kinds of apparatus and component parts for telephone equipment. It also purchases for the Bell System, distributes supplies, and installs central office equipment.

Western Electric maintains thirty-two warehouses strategically located throughout the country. You have seen dramatic evidence of the benefits of this arrangement in fire, flood, hurricane and other emergencies. They are important also in plans for national defense.

There are great values in the Western Electric setup. No other way would work out half so well for telephone users and the nation.

BELL TELEPHONE SYSTEM

Millions of operating dollars are waiting to be saved

(by plant managers who adopt organized lubrication)

Concept of Organized Lubrication to save cash in 5 areas of plant operation is proving to be a most fertile field for plant-wide cost control. Two reports now available from Texaco on opportunities, methods, case histories.

"Millions of dollars have already been saved in the operating costs of plants where management has recognized the importance of lubrication and has organized planned lubrication programs. Millions of dollars are waiting to be saved in plants where management has not yet become aware of the benefits of organized lubrication."

The entire July, 1958, issue of *Lubrication* magazine is devoted to "Organized Plant Lubrication." The statement above summarizes the issue's findings.

In effect, this and other writings on the subject reflect the fact that here is a relatively new and certainly fertile field for real cost savings in plant operations.

There's enough evidence in to cause excitement among the experts. Among the experts are the men who are putting Organized Lubrication to work—the plant managers and their team of engineers.

For, in assuming the large burden of satisfying the corporate measure of profit and loss on their units, plant managers have been quick to adopt new concepts and practices that result in plant-wide savings, such as planned overhaul, professionalized purchasing and organized quality control.

Most of these have been cost-controlling programs. So is Organized Lubrication. From the evidence in so far, this can prove to be one of the most fertile of the new plant managing practices.

Why? *Because Organized Lubrication can create cash savings in five ways; in inventory, production, downtime, maintenance and equipment life. Once adopted as plant practice, Organized Lubrication is placed in harness by plant engineers, production superintendents, maintenance superintendents, and purchasing agents.*

Let's acknowledge now that lubricants alone, no matter how excellent, are not the secret; rather, it is the setting of goals, the organizing of methods, and the expertness of men who can combine a knowledge of this new opportunity with an understanding of plant practices and lubrication.

In plants throughout the country Texaco's planning book has been studied and put to use. Some large corporations have adopted its recommendations on a staff level, or have set up committees to study the subject. Many plant units report savings from 10 to 100 times the cost of the lubricant used!

If you are a member of a plant operating group, or if you are concerned with cost control in many plants, you will find this subject well worth an introductory 10 minutes or so.

SEND FOR TEXACO'S NEW GUIDE FOR ORGANIZING LUBRICATION

Limited quantity available; please attach coupon to your company letterhead

• • • • • • • • • • • • • • • • • •

The Texas Company
Dept. D60
135 East 42nd St.
New York 17, N. Y.

Please send me Management Practices that Control Costs via Organized Lubrication.

☐ I would also like the July issue of Lubrication Magazine (published by Texaco).

Name____________________ Title____________

• •